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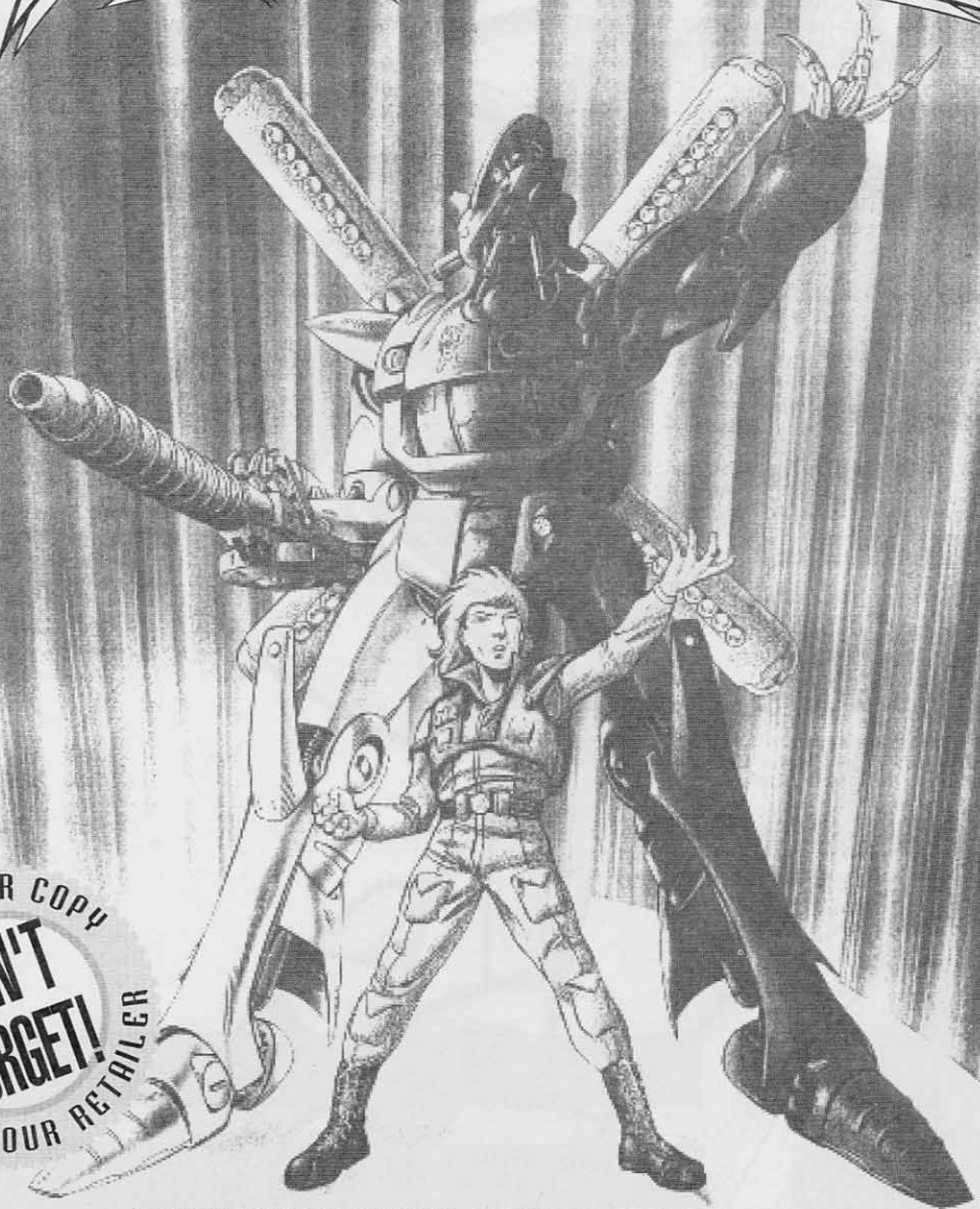
• PATLABOR SPECIAL

• MEKTON: CLOSER TO JAPANIMATION

• TECHNO POLICE 2100 AD

.....
ONE MAN, TWO PATHS

..... CYBERSUIT **ARKADYNE**



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JUSTICE AND SECURITY

by Daniel Faucher



In recent years, one phenomenon has emerged in and around our cities and countries; an increasing rate of crime. Is it due to the difficult economic situation? Is it due to some cultural crisis? Or is it caused by the raising popularity of violence on our small eye-witness screen that is generally called T.V.? Well, I leave it up to your judgement.

What we know is that societies have commonly decided to combat crime by using better trained and better equipped police squads (sometimes battalions of soldiers, tanks, planes and ships). Following this ideology, the Japanese animated world came up with a version of their own: PATLABOR, The Mobile Police.

Now this is an original idea and a conscious one too. You see, as you will find out in details in this issue, the existence of the mobile police PATLABOR is directly related to one of the fastest growing concern of the 90's: pollution, or to be more specific: the greenhouse effect.

Furthermore, the PATLABOR function is to defend the cities against criminals who could get the idea to steel a WORKLABOR to pursue their Machiavellian goals. In other words, this is not some sort of robot-cops (the PATLABOR is much bigger and has a human pilot inside) with no brains but a simple program instead whose functions are to arrest or kill people.

Nevertheless, these Japanese futuristic S.W.A.T.'s (So! What A Team!?) have the same mission than our beloved donut eaters (policemen!!): to enforce the law and protect everyone's possessions. Now, you are probably asking yourself: "Does the PATLABOR get any success at it?" We will simply answer to that: "Does our own police force have more success?"

Somehow, it does not matter. After all, this is a fictitious animated series and what is more important is its very entertaining aspect and the marvelous elegance of the mechas.

Anyway, if you want to know everything there is to know on the PATLABOR series and on all the mecha which appear in it, THIS IS THE ISSUE YOU SHOULD GET. Inside this March/April MECHA•PRESS magazine you will also find out why the PATLABOR mobile police have a technically restricted potential of existence. Also, do not miss in the "Engineering Outlook" section our blue print of the INGRAM, the champion of justice and security in the PATLABOR universe.

Finally, we are proud to present, in this Special Police issue of MECHA•PRESS, a hot new game which is largely based on the manga series APPLESEED. This game is called: TECHNO POLICE 2100 AD.

WARNING! This magazine is protected against thieves. It contains a microchip which, if not deactivated at the cash, will ignite this magazine, which is made of a new type of highly flammable paper, as soon as you pass the door of your favorite retailer.

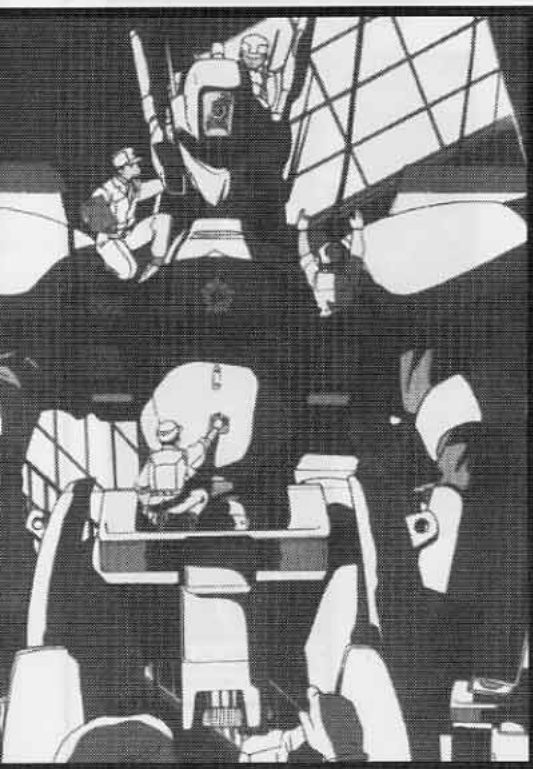
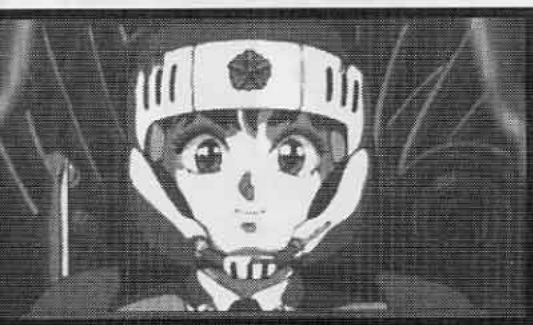
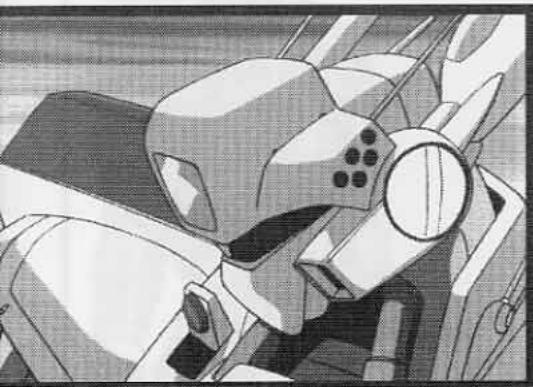
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WHAT'S "PATLABOR"?

by Martin Ouellette



The first time I heard of *Patlabor* was in June 1990, on a very hot and humid Friday afternoon, while doing my usual comic run (I remember because that day, I found the three *Nausicaä* comics that completed my collection). I saw a freshly arrived *Newtype* Magazine. Of course, I couldn't resist. I'm only human. I bought the thing, brought it home and then started to scrutinize the pages (I cannot read Japanese but I sure can look at the images!). That's when I found something quite interesting. A police animation show with mechas? Weird idea but imaginative. I like that! The name was *Patlabor*. And the mechas were sharp. So sharp that I bought three models. The rest is, as they say, history.

To understand the remarkable success of "Mobile Police *Patlabor*", one must go back to 1983, when Manga writer Magami Yuuki began this story as a pet project. What he imagined was nothing more than a parody, designed to be fun but not really brainy. Five years passed, then Yuuki decided to get this little work of his published. Little did he know that the Manga form of "Patlabor", published by "Shonen Sunday", would sell 300,000 copies. Of course, animation fans expressed that they would really like an animated version and in April 1988, work began on an O.V.A. series. It was to be done by a renowned team of professionals, collectively known as "HEADGEAR": director Mamoru Oshii (*Uru Sei Yatsura 2: Beautiful Dreamer*), writer Kazumari Ito (*Creamy Mami, Maison Ikkoku*), character designer Akemi Takeda (*Creamy Mami, Orange Road*), mecha designer Yutaka Izubuchi (*Nu Gundam: Char's counterattack, Aura Battler Dunbine*) and, of course, Yuuki himself. In September 1988, "Newtype", the famous animation magazine, announced the coming of a brand new animation craze. And they were right! The first volume of the O.V.A. series sold nearly 50,000 copies and from that moment on, "Patlabor" embarked on the road to glory. It must be said that the advertising was so well executed that the success shouldn't surprise anyone. Merchandising on a grand scale also helped, with the usual line of school supplies, posters, t-shirts and even dinner ware decorated with "Patlabor" graphics! But the real punch came with the models, when "Kaiyodo", a small model manufacturer, released a line of 1/60, 1/48 and 1/35 Garage Kits. They were so popular that the industry titan "Bandai" expanded it to a mass production level. Meanwhile, "Newtype" continued to keep readers and animation fans hungry by soliciting them for new mecha designs, characters, story lines and products that a "Patlabor" fanatic might want to purchase. Then Noa, "Patlabor" 's principal character, began to appear in commercials and now Alphonse, Noa's mecha, is a pretty well known name in Japan. Members of the official fan club can often be seen at conventions fully dressed in section 2 uniforms. And to think that all of this was only a pet project in the beginning! Yuuki must really be amazed by all this. I sure would be!



WHAT'S NEW

By Claude J. Pelletier

BATTLETECH REPLAY

The Japanese *Dragon* Magazine is talking about a story called *Battletech Replay*. It is written by Hiroshi Ootori & Group SNE, Illustrated by Kennichi Sonoda (BGC), and the mecha designer is Shouji Kawamori. Is this just a book or is this an animation? An animated story would be a marvelous news for RPG & mecha fans! *Dragon* is showing four character designs by Sonoda, and two mecha designs by Kawamori.

DETONATOR ORGUN



A 3 part SF mecha action series taking place on 23rd century Earth, in city #5. With technology, large controlled peaceful cities could exist on Earth, but fortune teller Kumi predicted that something would destroy that peace. Orgun is an alien robotic life form piloted by a "chosen" student named Tomoru. Part I is 60 minutes long and was released in August. (From *The Rose* #28).

BUBBLEGUM CRISIS SUBTITLED!

ANIMEIGO is proud to announce that they have obtained the North American Home Video rights to all eight (8) BUBBLEGUM CRISIS Original Animation Video (OAV) episodes. Under a licensing agreement with Youmex, Inc., AnimEigo now has the exclusive rights to produce subtitled and dubbed versions of all eight (8) episodes, and release them on videotape and laserdisc for sale in North America.

BubbleGum Crisis is a fast paced, animated science fiction series set in the year 2032. After a devastating earthquake some years previously, the city of Mega Tokyo is being rebuilt, largely through the efforts of the Genom Corporation. Genom is also the manufacturer of "Boomers", bio-mechanical androids used as laborers, bodyguards, and by the military.

BubbleGum Crisis centers around the KNIGHT SABERS, an all female vigilante group, whose goal is the destruction of Genom. They are lead by Celia Stingray, whose father invented the Boomers, and was then murdered by Genom. Before he died, he was able to implant in Celia his accumulated knowledge; this allowed Celia to create the powered "Hardsuits" that protect the Knight Sabers and allow them to battle the Boomers.

Only the Knight Sabers know the true nature of the evil Genom Corporation, and only they stand between it and supreme power.

BubbleGum Crisis is renowned for its pulse quickening action sequences, spectacular animation, sophisticated plot and one of the best soundtracks in the history of Japanese Animation. The first of the eight (8) episodes has been released in subtitled form on **Labor Day weekend** at the **ANIMECON** animation convention in **San Jose**, and the **WORLDCON** World Science Fiction Convention in **Chicago**. The other episodes will be released at approximately one month intervals.

Although the retail prices for each episode have not yet been set, we expect them to be under \$40 US, depending on the length of each episode. In addition, the entire series will be available on a DISCOUNT SUBSCRIPTION basis.

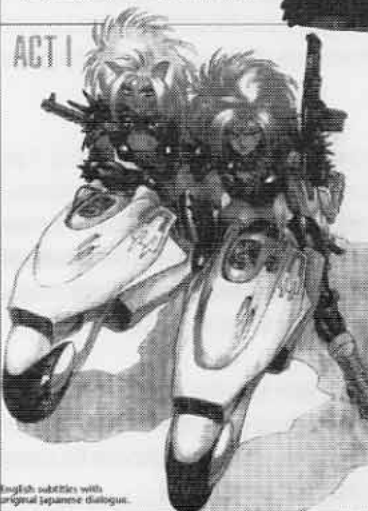
As with their other releases, special group purchase discounts will be available to those who place orders through their local animation club.

AnimEigo, founded in 1989, is dedicated to the popularization of Japanese Animation in the United States. Their first two releases, **MADDOX-01**, a science-fiction adventure, and **RIDING BEAN**, a contemporary action adventure, have been extremely well received by animation fans and clubs in the USA. This enthusiastic support has been a key factor in enabling AnimEigo to obtain the rights to a major series like *BubbleGum Crisis*.

For more information about AnimEigo, to place order, or to suggest an anime title you would like to see them release, write AnimEigo, P.O. Box 989, Wilmington, NC 28402-0989, USA, or call (919) 799-1501. Fax available. (AnimEigo Press Release)



DOMINION TANK POLICE



English subtitles with original Japanese dialogue.

NEW VIDEO COMPANY

Central Park Media, under direction of John O'Donnell, will embark on two separate ventures to bring translated anime to American home video audiences. One venture will be called US Manga Corps which was officially launched at the VSDA convention in July. Its first release will be *Dominion I*. To expand its market, US Manga Corps will ally itself with VPI/Harmony, which is distributed by BMG Distribution. In another venture, Central Park Media has exclusive distribution agreement with US Rendition to distribute *Black Magic* and *Appleseed*. In the agreement, US Renditions will help promote US Manga Corps in comic shops, while Central Park will help in video channel distribution for US Renditions. (From *The Rose* #28).

MECHA!



CYBERSUIT ARKADYNE

The two worlds of cyberpunk and psychopunk will clash for the first time in "VISION", the debut issue of CYBERSUIT ARKADYNE to be released in March by Ianus Publications.

In the 21st Century, the mining colony of the asteroid belt are struck by terrorist attacks. To protect the mining vessels against this unknown aggressor, the World Space Cooperative Administration (WSCA) developed the technology of the cybersuit, using cybernetic implants and gravitic drive. This symbiotic link with an almost invincible machine will have severe consequences on the mind of Glenn Taback, the chosen pilot.

CYBERSUIT ARKADYNE is a six-issue monthly comic series created by Tim Eldred and Jonathan Jarrard. ELDRED is already well-known for his strong story-telling and dynamic style full of action. He has published several comics such as BROID, SHATTERPOINT, CHASER PLATOON, LENS MAN, and CAPTAIN HARLOCK: DEATH-SHADOW RISING, but this time he has surpassed himself. "I'd had the original idea for ARKADYNE over five years ago," Eldred said, "and I knew it was going to be something big. It would contain complex plots and themes I could never have successfully pulled off back then... but after two years of producing steady work for Eternity, I know I'm ready for it now." Eldred solicited the assistance of technical writer and futurist Jonathan Jarrard to bring to the story an authentic level of technology. "John's contribution far surpasses anything I could have come up with in terms of hard science," Eldred continued. "The workings behind the Cybersuit in particular are incredible. This thing could really exist in another few decades and put to shame anyone who's ever laughed at the concept of a giant robot; this is the real stuff." "The way the comics market is these days," Eldred concluded, "you can't count on seeing this book if you don't place an order with your local comics retailer in early January. This is vital to the future of the series,

so please make a point to ask for it, or copies will vanish as quickly as full-open gravitic drive!" CYBERSUIT ARKADYNE by Tim Eldred and Jonathan Jarrard. "Vision", issue 1 (of 6) from IANUS publication available MARCH 1992. It will retail at \$2.50 US (\$2.95 Can).



There is a new game for the anime gamers. *Mecha*™ is a fast-paced miniatures combat system that remains true to the Japanese anime giant robot traditions from which it was spawned. Explosions, missiles exchanges, down and dirty hand-to-hand combat, and lethal firefights are the trademarks of this high-action and easy-to-learn game. The 160-page game-book includes: basic rules (battlepoles, phases, combat, damage, experience, movement), construction rules for mecha and powersuits, two different campaign systems for strategy and role-playing scenario (but they can be easily combined for a "Total Anime Game"!), 23 small scenarios, a sourcebook on the Aztec Empire, and some tips on how to prepare you model kits for the game. It's a very interesting game mixing wargame, models (used as miniatures), and role-playing. Its flexibility allow the players to design their own mecha, create their own setting and background, and play a version of their favorite anime series. The most innovative part of the game is the idea of putting mecha in an Aztec context and the use of poles to give a real tridimensional aspect to the game.

Mecha™ is now available directly from Seventh Street Games for \$25 US, plus tax and Shipping. Battlepoles are sold \$25 US by set of 5 (or \$7 US each). For shipping add \$3.50 plus 50¢ by item. Write to: Seventh Street Games, Orders Department, P.O. Box 720791, San Jose, CA 95172-0791, USA.



TECHNO- POLICE 2100 A.D.

by Marc Alexandre Vezina
& Alex Racine

For almost forty years now, the country has been plagued by a rising wave of armed criminals. Now with a growing number of unemployed people and spreading poverty (caused by the economical crisis of the late twentieth and early twenty-first centuries), more and more people have turned to crime for a living. In the nineties, you can find good weapons everywhere, even the heavy hardware favored by the army, as long as you have the money to pay for it. Soon, a new breed of barbarian was born: showing no pity and expecting none, they roamed the streets freely, alone or in small gangs, dealing death and destruction over all the land.

Although scientific research provided several solutions to the poverty problem around the years 2020-2030, the problem remained, but in a dif-

ferent way. As the gangs got smaller, they also got tougher, and more aggressive. Even terrorists, mainly deranged people seeking to support even more deranged causes, had bought enough weaponry to cause a serious threat to public security. In order to create the first utopian civilization mankind had ever known, society needed a way to get rid of this torn in its side.

I N T R O D U C T I O N

Welcome to TECHNOPOLICE 2100 AD, the game of elite police action in the twenty-second century. You will now enter a world not so different from our own, but much more dangerous. Criminals roam the streets freely, running around with guns, trying to blow the head off anybody unfortunate enough to cross their path. This is the world of TECHNOPOLICE.

Now before we begin, let's see what we need.

PLAYERS

You will need at least two persons to play the part of the cops (the bad guys are run by the referee). However, the more you are, the more fun you get. About five persons (including Referee) will be just perfect for an afternoon play. Each player will create a character and keep him or her until he or she gets killed. Character generation is fully explained in the first section.

REFEREE

The Referee is the person who chooses the scenario, draws the map, and explains the events as they occur. As said before, he also moves the criminals around, and gets to pick from everybody else's snack (referee's prerogatives, we call it).

The referee always has the last word on everything: if your referee tells you, "Suddenly you die of cardiac problems.", then your character just says "Eekk" and... well, drops dead.

The referee supplements the rules (he creates his own rules to cover unexpected situations), so a good referee must also have a wild imagination.

Of course, with such immense powers at his (or her) disposal, a referee career is not recommended to persons who can't bear to lose, or have no idea what the concept of fairness and equal justice means.

MAP, COUNTERS AND PARAPHERNALIA

The game is played on a map representing the general location where the action will take place. This can be a warehouse, an airport, or any other place you can think of.

TECHNOPOLICE is designed to use hex maps, so we recommend using a wash-off hex map (the type on which you write with water-soluble markers). If properly maintained, it will last many years and represent a good investment for the serious gamer. Of course, any other map is fine as long as it's covered with hexes...

You will also need some counters to indicate the relative position of everyone. Make sure they have a front and a back side. Talented players and/or referee may want to use miniature models or even a full scale mock-up instead of a map. But let's not get too excited here...

And last but not least, don't forget to bring along drinks and snacks (we're partial to M&M's ourselves): nothing empties a stomach faster than a rough fight! Background music is nice too, and helps set the mood for a good game, especially in tense situations. Try the Alien movie soundtrack, or even...The Exorcist!

A WORD ABOUT WARGAMES

TECHNOPOLICE is a fast-paced role-playing wargame: lots and lots of people get shot and injured during the game. In fact, lots of people die. But since this is a game, nobody should get worried. So your favorite character got reduced to a thin red paste on the wall by a villain with a missile launcher: so what? You take a new sheet and roll a new character for the next session, that's all. It's a lot like putting more coins in a video game and pressing "start".

Surely, you cannot do that in real life. But this isn't real life... so bash and shoot, and have some fun!



SECTION I: CHARACTER GENERATION

CLASSES

If you look at the player's sheet, you will see that every character has seven statistics (called "stats") to represent his or her strengths and weaknesses. Each statistic has a class (except Life, see further): from Pitiful (!) to Exceptional. Pitiful is the lowest possible class for a human being, while Exceptional is the highest. Take a look at this table:

RANDOM CLASS TABLE

ROLL	CLASS	SCORE
01-06	Pitiful	5
07-24	Low	10
25-75	Average	15
76-97	Remarkable	20
98-00	Exceptional	25
	Inhuman	30+

The Inhuman class is just that, inhuman. Only robots and robot-like machines can reach it, never normal human beings.

For each stat, you will roll a percentage dice to determine its class. A percentage dice is two ten-sided dice, rolled together, one marking the tens and the other the units.

Example: I roll two dice. The first is a six and the second is a four. So my percentage score is sixty-four. Don't forget to specify which die is the tens before rolling...

STATISTICS

Physical Power (PP): this represents the general physical strength of the character. It is used to determine your Life points (see below) and the amount of damage that may be inflicted by a blow alien.

Physical Resistance (PR): this is the general endurance of the person; it's also used to determine your Life points.

Combat (C): the ability to land blows and dodge them in hand to hand confrontation, using fists, feet and weapons (or anything else you might imagine...). It's also a measure of your reaction speed and general agility.

Aiming (A): your ability to shoot and throw weapons.

Battle Reflexes (BR): this is the "sixth sense" and general awareness of a person. Used to determine initiative.

Speed (S): the speed at which you move. It will be fully explained in Section 2. For now, leave it blank.

Life: life is the extend of damage you can withstand before dying. It is equal to the sum of your Physical Power score and your Physical Resistance score.

These are your statistics. In the combat section, you'll see what their uses are. But for now, just roll your percentage dice for each stat (using the above table) and fill in the blanks on the character sheet. We suggest using a pencil. This is the profile of your police officer, without the armor.

IMPORTANT: Of course, this is an elite police force: there are certain standards to meet to be accepted. If you have

three or more Stats at "Pitiful", you are a hopeless case. Discard the character and roll a new one. Please.

But before you put on your powered armor, you will have to enhance it with customized systems and gizmos suited to the mission ahead*. To help you make the right choice, we will go over the combat rules and then, move on to the technical stuff. All of this in the next issue of MECHA-PRESS!

*This is the purpose of the lower half of the character sheet.

TECHNOPOLICE 2100 AD CHARACTER SHEET

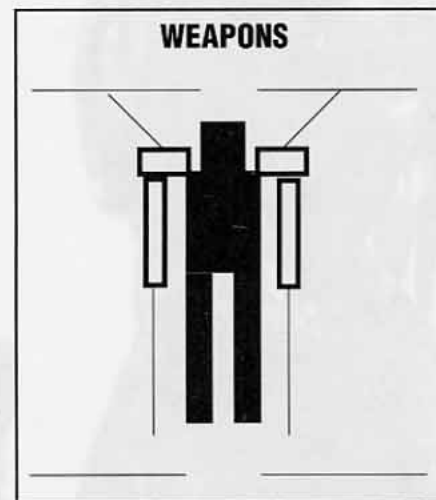
NAME: _____

CLASS	SCORE
PHYSICAL POWER: _____	
PHYSICAL RESISTANCE: _____	
COMBAT: _____	
AIMING: _____	
BATTLE REFLEX: _____	

	COMBAT	NON-COMBAT
SPEED: _____		
LIFE: _____		

CYCLOP ARMOR

WEAPON	AMMO
PAYLOAD: _____	



	COMBAT	NON-COMBAT
SPEED: _____		
ARMOR VALUE _____		
STRUCTURE VALUE _____		

EQUIPMENT _____



MEKTON; CLOSER TO JAPANIMATION

by Marc Alexandre Vezina

Mekton is a fast and furious action game. The basic rules are easy to learn and understand, allowing you to start playing almost instantly after buying the book.

There are six mechas already designed in both Mekton II and Mekton Empire rulebooks, plus a dozen in Roadstriker II, but they can get tiresome after a while. If you begin to design your own machines, you'll find this alternative method interesting. Simply follow the instructions...

STEP 1: BUDGET

First thing to do is picture the mecha we want to represent. Is it hi-tech or fairly low-tech? How many weapons does it have? How fast is it? etc. Then, you have to decide how many Construction Points (CPs) you will use in the design of your mecha. CPs are like money: they allow you to "buy" the different parts of the machine. The more you have, the better the mecha will be.

The number of CPs at your disposal is equal to the weight (in tons) of the mecha multiplied by a factor (1 to 4). Factor 1 is low-tech (if you can call a mecha low-tech!), like the machines in Gundam Sentinel (see Mecha designs, further on). Four is the maximum factor: very hi-tech, as in Gundam F-91.

Some mechas won't fit in the chart: those under 10 tons, for example. To correct this, simply multiply the weight by a factor (say, 10, 100 or 0.5) to get the "new" weight, which will fit the tables. To simplify the situation and give you some examples, I have included a few factors (both Tech and Multiplier) in chart #1.

When you are finished, take each characteristic and make the following modifications: round every fraction down, except kill fractions which are now hits.

- **Weight:** back to the original weight (divide "new" weight by multiplier factor);
- **Servos:** divide Kills and hand to hand bonuses by multiplier factor;
- **Armor:** divide SPs by multiplier factor;
- **Powerplant:** divide Kills by multiplier factor;
- **Sensors and Hydraulics:** divide Kills by multiplier factor;
- **Ground MA:** divide by multiplier factor;
- **Flight MA:** divide by multiplier factor;
- **MV:** do not change, calculated on the "new" weight.
- **Weapons:** divide Kills, damage, and range by multiplier factor; accuracy, shots, and burst value don't change.
- **Final cost (in CPs):** divide cost by multiplier factor.

STEP 2: POWERPLANT

Now, you have to choose the powerplant to move your mecha around. The engine determines the speed and overall agility of the machine, it is a very important component indeed.

"Chart #2: powerplant" replaces the original table on page 66 of the Mekton II rulebook. To use it, simply check the weight of the mecha to find the required powerplant. It will then be adjusted to your specific needs.

CHART #1: CPS ALLOWANCE

Animation	Multiplier Factor	Tech Factor
Patlabor	X10	New Weight X1
MS Gundam	-	Weight X1.5
Z Gundam	-	Weight X2
ZZ Gundam	-	Weight X2.5
Char's Counterattack	-	Weight X3
Votoms	X10	New Weight X2
Macross	-	Weight X2 or 3

CHART #2: ENGINE REQUIREMENT AND CHARACTERISTICS

Weight	Basic Ground MA	Basic MV	Basic Cost	Upgrade Multiplier	Damage Capacity
10-19	8	-3	2	1	2K
20-29	7	-4	4	1	4K
30-39	7	-5	6	1	6K
40-49	6	-6	8	1	8K
50-59	6	-7	10	1.5	10K
60-69	5	-8	12	1.5	12K
70-79	5	-9	14	1.5	14K
80-89	5	-10	16	2	16K
90-99	4	-11	18	2	18K
100-109	4	-12	20	2.5	20K
110-119	4	-13	22	3	22K

You can either upgrade or downgrade the engine. When downgrading, you sacrifice speed and/or agility to get more CPs, according to this formula:

each -1 MA or MV = (2 x Upgrade Multiplier) Bonus CPs

These Bonus CPs are not counted in the cost, but they can be used like any other CP. Of course, you cannot downgrade then upgrade to get some free CPs! It's one or the other. Neither can you have less than 1 point of Ground movement, even if your mecha has no legs and can only fly. To upgrade, it gets a little more complicated: decide how many Upgrade Levels you want, check the chart (#3), then pay the resulting price. The Upgrade Multiplier is found in the engine table.

STEP 3: MAIN BODY AND COMPONENTS

- This step is exactly the same as the one on page 60 of the Mekton II rulebook, with one exception: when buying head or arms, they may be more than two level lower than the main body.

STEP 4: SUBASSEMBLIES

- Again, this works exactly like in the book (p.61). The rule for flight systems, however, is changed a bit.
- Not all mecha can fly, but many do. To equip your machine with a flight system, simply check the number of lift points

- needed to get in the air, using weight as a reference. Then decide the type of propulsion: jet or fans. Fans are cheaper, but they take more space, are slower than jet, and are more easily destroyed. Also, they are not suitable for use in vacuum.

- To fly faster, check the last column of the Flight System Chart: decide how many points of MA you want on top of your basic Flight MA. Then multiply by the number corresponding to the weight of the mecha to know how many more lift points you need. Basic MA for jet is 12; fan's basic MA is 8.

- Next issue, extended damage tables and fuel rules are the orders of the day. See you then.

CHART #3: ENGINE UPGRADE

1 Upgrade Level = +1MA or +1MV

2 Upgrade Level = +2MA or +1MA and +1MV or +2MV

and so on...

Upgrade Level(s)	Cost (in CP's)
1	1X Upgrade Multiplier
2	3X " "
3	6X " "
4	8X " "
5	12X " "
6	16X " "
7	20X " "

CHART #4: FLIGHT SYSTEMS

Tonnage	Pts. Lift Needed	Extra Pts. to Gain 1 MA
10-19	3	1
20-29	3	1
30-39	6	1
40-49	6	2
50-59	9	2
60-69	9	2
70-79	12	3
80-89	12	3
90-99	15	4
100-109	18	5
110-119	24	6

Thrusters cost 1 CP for every 1 Pt of lift. Base MA 12

Fans cost 1 CP for every 2 Pts of lift. Base MA 8

Wings add +2 MA

Fighters add +6 MA

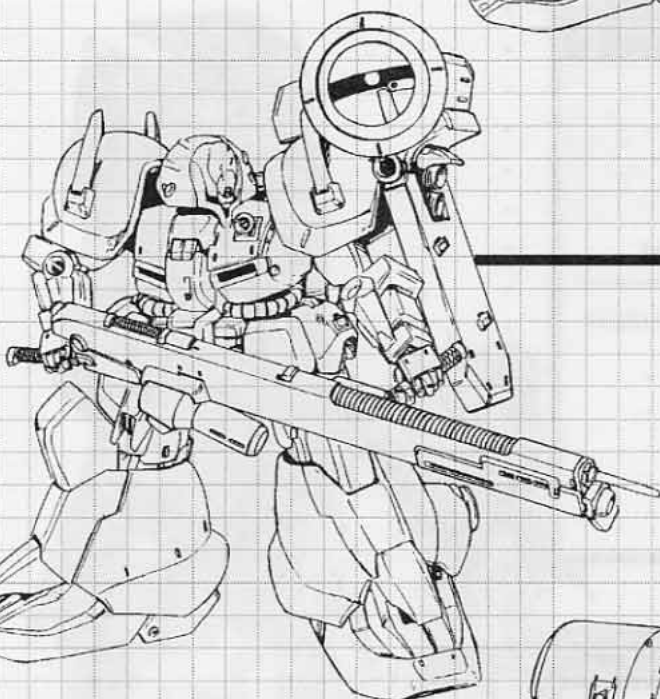
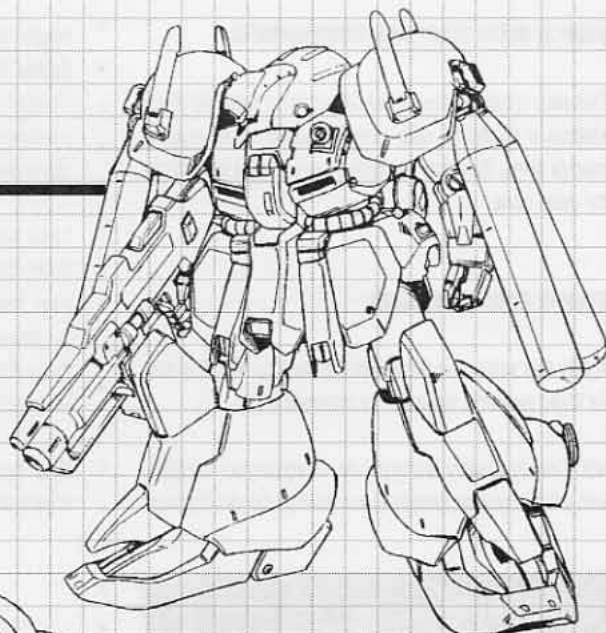


RMS 141

XEKU-EINS

TYPE A:

150 MM RA -
PLASMA CANNON RA -
4X1500 PTS LA, RA EXTERNALLY
MOUNTED FUEL TANKS

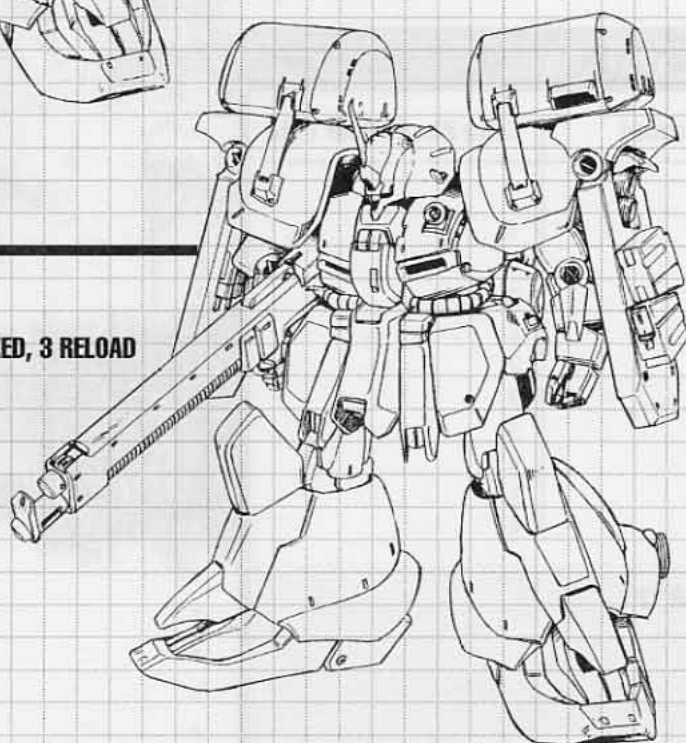


TYPE B:

300 MM RA 1 RELOAD
4X1H E.M.W. LA, RA
ECM LA
ECCM LA

TYPE C:

3 MACHINE CANNONS RA LINKED, 3 RELOAD
PLASMA GUN RA
4X1H E.M.W. LA, RA
2XSTRIKE MISSILE MB



MECHA DESIGNS ADAPTATION FOR MEKTON

by Marc Alexandre Vezina

To introduce and show off our new mecha construction rules for Mekton, we used them to design one mecha from the Gundam Sentinel novel.

The XEKU-EINS is a modular mecha: each version share the same components, but differs in armament.

The Type A uses the new fuel rules, which will be found in next issue. If you do not wish to play with them, the Type A only costs 145 CP's.

RMS=141 (XEKU-EINS)

NAME: XEKU-EINS
TONNAGE: A: 72.5 B: 80 C: 87
WEIGHT MULT.: 1
TECH MULT.: 2
CPS: A: 187 B: 160 C: 174

GROUND MA: 6
FLIGHT MA: 14
MV: -7

COMPONENTS

NAME	LEVEL	ARMOR
POWERPLANT	MH	-
MAIN BODY	LH	AH
HEAD	HS	LH
ARM (2)	HS	AH
LEG (2)	LH	LH

STANDARD WEAPONS AND EQUIPMENT

NAME	LOC	REMARK
EXTRA SENSORS	MB	-
FLIGHT SYSTEM	L, L, MB	JET

MECHA!™

Seventh Street Games' New Addition to Anime Gaming
By Dave Georgeson

Mecha! is a tabletop miniatures game simulating the look and feel of Japanese anime. That's the official line. What it's really about is fun. When we first began creating the game, it was because all the other games in the genre played slow, long, and complex using a sort of "giant robots = tanks with legs" approach. But, being fans of Japanese anime, we knew the correct approach should be "giant robots = really big guys with guns and metal skin." With that idea, we formulated rules that were not only fast, but simple and easy to learn. Whenever a question came up on how a rule should be fashioned, we chose to actively ignore physics in favor of what we had seen in anime combat sequences. We watched a lot of hours of untranslated footage to find maneuvers and tactics and get the broadest possible base of knowledge. Although some of it was shelved temporarily because it was too specific for an adaptable game, we tried to include everything we had seen and, of course, tried to keep it simple enough to be easily learned and not forgotten.

What came out was an enormously fun game, which we were calling *Mecha! Mecha! Mecha!* as a sort of joke tribute to *Tora! Tora! Tora!*. We showed it at a few local gaming groups and discovered that people really liked our pet project. Dropping two-thirds of the title, we began simply calling it *Mecha!* and began feeling the first stirrings of "The Big Dream."

We thought, "Why not try to make a go of this and see if we can sell this thing?" Most of our friends told us we were mad, but we developed a pre-release version (48 pages) and took it to a few gaming conventions. To simulate flight, we developed a three-dimensional movement system that used *battlepoles* to suspend the miniatures high above the table so the visual spectacle of a mecha dogfight translated into gaming. The battlepoles we used then were primitive wood dowel constructs that tended to tip over when someone breathed hard and we used miniatures banged together from Revell plastic kits, but people still loved it. It seems obvious now, but gamers were (and are), tired of miniatures games that take over six hours to play. Not only was *Mecha!* considerably faster to play than that (around three hours on the average), but you could play bigger battles in that time and our system was three-dimensional! We had flight, transforming mecha, large explosions, and sudden death. Gamers ate it up.

So back to the shop we went. This time we got serious about it. Refusing to listen to any negative comments, we hammered away at the rules and created an original background sourcebook for use with the system, all while making sure gamers could play any background they wanted with the same set of rules. We developed a professional *Battlepole!*™ from clear acrylic and began sculpting miniatures to fit the Aztec background we were writing. Then we scrounged together every cent we had, gritted our teeth, and paid the printer.

■ Luckily, it sold! Now we're releasing our first companion volume for *Mecha!*, called *Spirit Warrior Empire*™ (shipping on December 1, 1991), and a miniatures line is on the way.

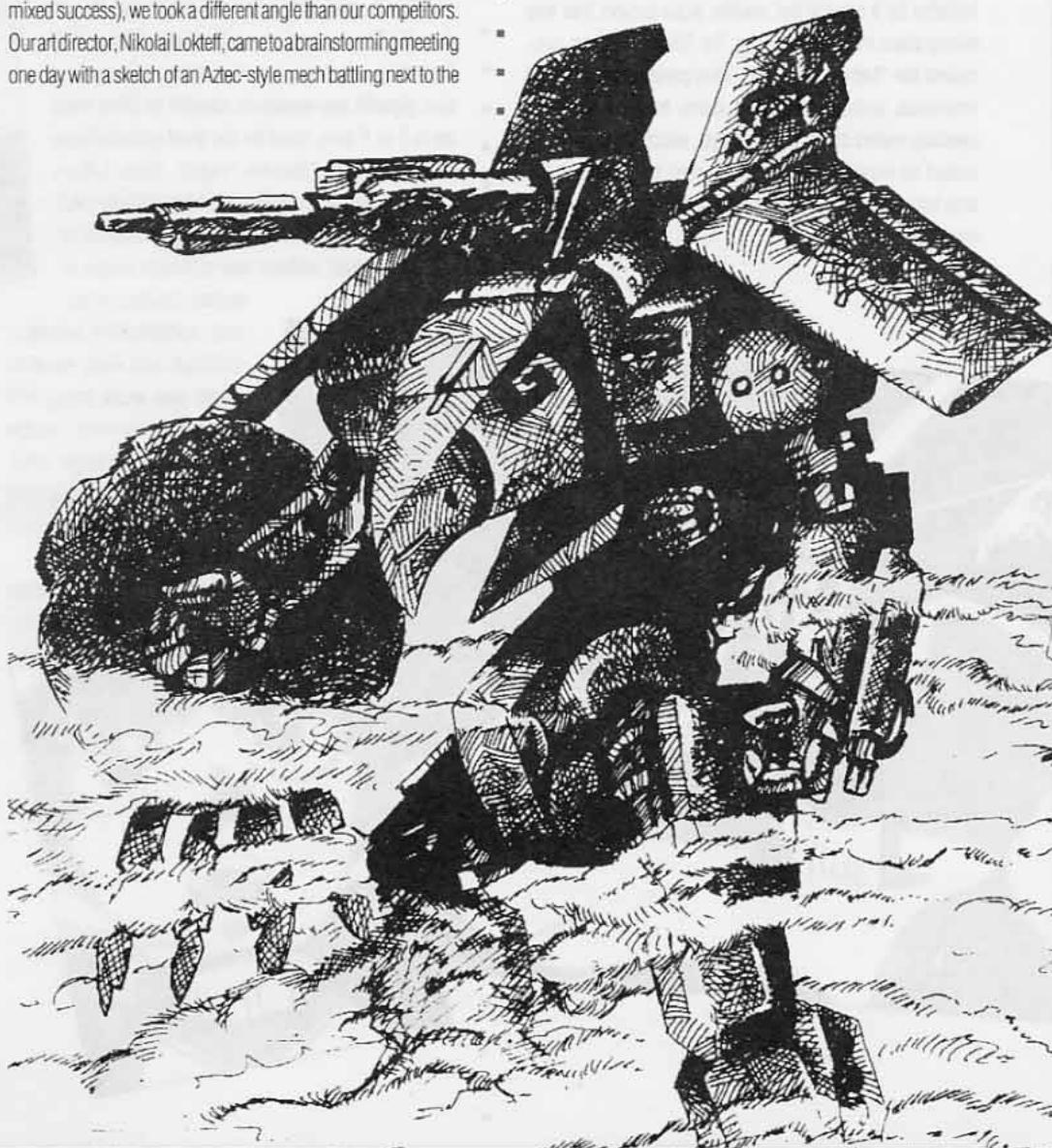
■ Seventh Street Games is based on a few sound ideas. First, games should be fun. Fun to us means simple to play and fast enough to keep the interest of players when it's not their turn. ■ Secondly, the game should be original. Nobody needs another rehash or rip-off of the same old rules already floating around in the gaming world. And thirdly, we're not just doing this for our pleasure. We are sincerely interested in what our customers have to say about the games we write. Most of us have been involved in gaming for over 10 years and know a thing or two about designing a fun game, but we know all too well how many game companies build an ivory tower with the attitude of "we know what you like and you'll like what we write." If we can keep in touch with the gamers playing our products, we should be able to write the games you want to play.

■ But, in a nutshell, our goal right now is to come up with new, fresh ideas that are a lot of fun to play.

■ Because the giant robot genre has been tackled before (with mixed success), we took a different angle than our competitors. • Our art director, Nikolai Lokteff, came to a brainstorming meeting one day with a sketch of an Aztec-style mech battling next to the

■ ruins of a pyramid temple. We were all over it. We hit the libraries, ■ scanned the art, and slowly evolved the ideas you'll find in the ■ sourcebook section of *Mecha!* and *Spirit Warrior Empire*. The ■ idea in short: An alien race decides that warring amongst itself is ■ too disastrous to their society and the universe around them. ■ They decide to split up into 400 different clans and scour the ■ populated galaxies for "pawn" races to decide their battles on a ■ small, controllable level. One of these clans of aliens finds Earth ■ and the Aztecs. The Aztecs are perfect for their needs; warlike, ■ aggressive, honorable, and firmly entrenched in worshipping ■ easily imitated gods. The aliens appear before the Aztecs as those ■ gods and demand that 1000 of them "ascend to the heavens" to ■ fight the gods' enemies. The brave volunteers are taken to a planet ■ far off in the galaxy and settled there. They are taught how to use ■ technology, but not how to create it. This way, the aliens have ■ more control over their pawns. Thus, the Aztecs become mechan- ■ ized while still maintaining their own culture and traditions.

■ It sounds a little simplistic in summarized form, but that's why ■ we've written over 90 pages describing the political intrigues, ■ technologies, alien empires, methods of war, city-state cultures, ■ and background of this transplanted culture.

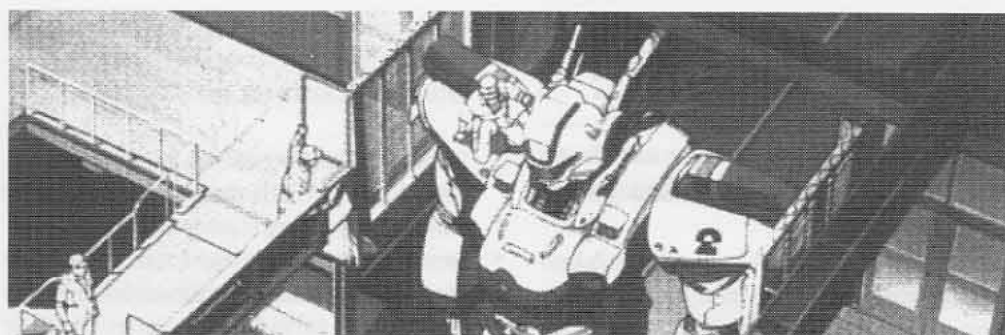




WHY THE "PATLABOR"?

by Martin Ouellette

As everyone knows, pollution is a great problem of our planet. Carbon dioxide, smog, depleting ozone layer and such are causing us problems that were not foreseen at the beginning of the industrial revolution. Moreover, the greenhouse effect will begin to affect the polar regions very shortly. This entails the melting of the ice caps, quickly followed by a steep rise of the ocean level, threatening coastal cities around the world with gradual flooding. For us, in the real world, this problem has not surfaced yet. But in the "Patlabor" world, it's already happening. And one of the coastal cities we talked about is Tokyo, Japan. To make sure that the city remains safe from the flooding, a gargantuan mega project was initiated. Initiated by a similar but smaller scale project that was taking place in San Francisco, the Tokyo planners conceived the "Babylon Project". This project was to build enormous embankments and dams to hold back the swelling waters of the Bay of Tokyo, which would then be sealed off from the ocean and drained, transforming the area into usable land, where additional housing could be constructed.

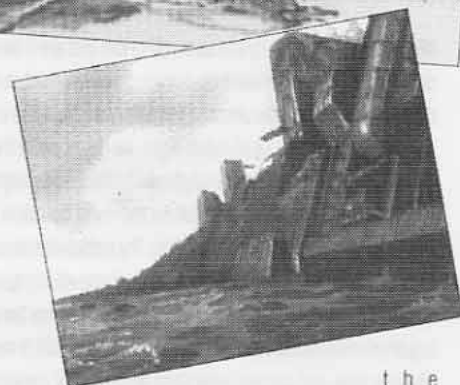


And that's where the Labors enter the picture. Construction workers are only human and the sum of work they can accomplish by themselves is very small. That meant that the "Babylon Project" would be extremely long to complete. But time was running short and the engineers responsible for "Babylon" knew very well that if only human workers were employed, the dams would never be finished on time. And then, the flash occurred. Why not construct a machine that would give one worker the strength of a hundred? The necessary hydraulic, electric, electronic and robotic technologies already existed. Why not create an enormous construction worker made of metal and composite plastics? That's exactly what they did. Those machines, called Labors, were in the beginning extremely primitive, being nothing more than gigantic exo-skeletons, capable of lifting loads up to 5 or 6 tons, ideal for the giant embankments called for by the "Babylon Project". Soon, Labors became a common sight in the streets of Tokyo and other major cities. But, with the easy availability of Labors however, entirely new problems began to surface.

Drunken or unruly construction workers, criminals and even terrorists could now wreak havoc with enormous machines, capable of punching through walls, ripping cars in half or playing all sorts of pranks.

By 1995, the Tokyo police department-

ment decided that in order to maintain peace in the streets, they had to develop their own Labor technology. Companies like "Schaft Enterprises", "Hiishi" and "Manabe" made offers to construct the new police/patrol Labors also known as "Patlabor". For reasons unknown to a lot of people, "ShinoHara Heavy Industries" got the deal. Research began immediately and in October 1996,

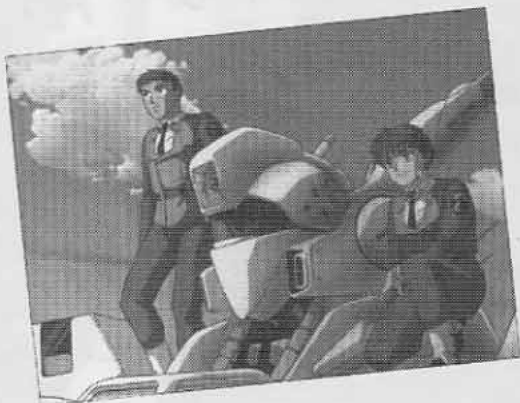


the MPL-96 "Asuka" was put into service. It was followed, in November 1997, by the MPL-97S "Python", produced by "Manabe Heavy Industries", a Labor specialized in anti-riot police actions. These mechas were used by the "Mobile Police", an elite corps of officers specializing in Labor crimes.

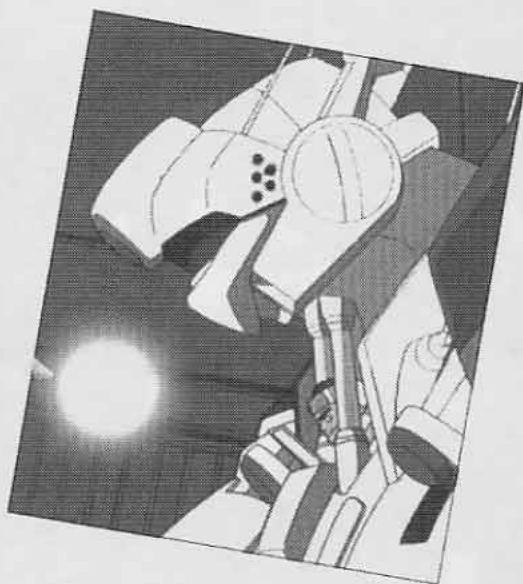
By 1998, the "Asuka" was declared obsolete by work Labor standards. In April of the same year, "Shinohara" began production of its advanced "Patlabor", the AV-98 "Ingram", which was first put into service by Section 2 of the Special Vehicle Division (SVD). The "Ingram" was a highly sophisticated machine, a light-weight, high performance Labor, the most maneuverable ever made. But, of course, others followed, even lighter and more



maneuverable than the "Ingram". A good example is the AV-X0 type "Zero" which later went into production as the AV-0 "Peacemaker". Military Labors also began to appear with the now famous ARL-99B "Helldiver", as well as the less known Type 7B/2B Brocken from "Schaft Enterprises Europe", and the AL-97 "Samson" heavy combat Labor produced by "Hiishi Heavy Industries". New Labors are being designed and put into service, while their range of utilization broadens every day. Deep sea research, rescue missions, fire fighting and even recreational needs are now being met by many Labors created for these activities.



Some people are asking "Why don't we have Labors? We already have that kind of technology, don't we?" In clear, the response is: we don't have Labors or mechas because we don't need them yet! The cost of building them would far outweigh their advantages and to think that we already have the technology to create them is simply ludicrous. A "Mobile Suit" from "Gundam" may be possible and even then, it would be used only in space, but yet again, what's the utility for such a machine in our world, in 1992? You can love mechas (like me) but you also have to be realistic about them. You can dream of seeing one in your lifetime but don't wait for them!



PATLABOR THE MOVIE 1999 TOKYO WAR

Reviewed and edited by Andrew E. Johnson
(Internet aejs. wayne.edu) (From Anime Il-
lustrated #7).

With the rapidly accelerating development of hyper-technology, a humanoid-type machine called "LABOR" is being used in every field of industry. However, it has created the new social menace of "LABOR" crime. In order to curb such crimes from happening one after another, the Metropolitan Police Department has established a special department, the "Special Vehicle Section No. 2". It consists of a company of patrol "LABOR" known as "PATLABOR".

In 1999, the Babylon Project is exposed to the menace of a computer virus...

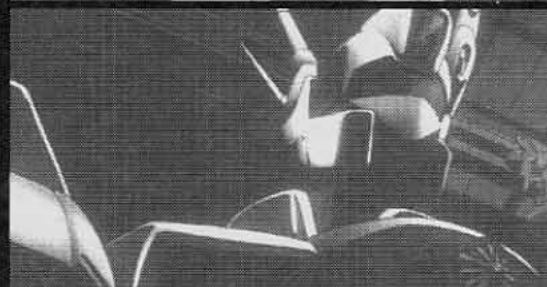
S Y N O P S I S

(A MAN, ACCOMPANIED BY A BIRD, RELEASES THE BIRD, AND JUMPS INTO TOKYO BAY REGARDLESS OF OTHER PEOPLE'S WARNING AND RESCUE EFFORTS).

Japanese Self Defense Army, with support from attack helicopters, paratroops into a forest to intercept and destroy a LABOR which has lost control. After they destroy the LABOR, the soldiers find that there was no one sitting in the control seat.)

A helicopter is taking Asuma and Noa from SVS #2 headquarters to the "Ark", the maintenance platform for the Labors. The pilot explains the construction work for the new land that they converted from a shallow sea base. There are approximately 3600 LABORS working in this project (Project Babylon), some 40% of the total number of LABORS working in the Tokyo area. This will provide land for 5 million people.

Nagumo is working in the control panel of a PATLABOR when Asuma and Noa arrive. They discuss the HOS (Hyper Operating System) that has been provided to improve the functions of LABORS by Shinohara Heavy Industry. Shinohara H.I. released HOS hoping to capture the LABOR market. It is supposedly increasing the productivity of LABOR by 30%, so 80% of the LABORS have been already converted to the new operating system.



Nagumo tells Asuma that Shige-san, who is now in New York helping set up the Patlabor troop in NYPD (with Kanuka Clancy as its Captain. "That's very dangerous" says Asuma.) was extremely concerned about HOS and had been asking her to heavily check the operating system.

The Police head tells Gotoh and Nagumo that the SVS #2 - 1st platoon's training schedule has been postponed so SVS #2 - 2nd platoon must take over all the work of protecting the construction works. Nagumo is obviously unhappy about this heavy burden and the negligent attitude of their superiors. When Nagumo threatens to go directly to headquarters for a better explanation, they are told that the run away military LABOR was equipped with HOS, and so is the new Type 0 AV which the first platoon is training for.

In the SVS #2 headquarters, the bad news of no vacation being granted upsets all the members of SVS #2 except Ohta. He is more than happy to serve citizens of Tokyo.

Ohta: "It is our duty to protect the rights of Tokyo citizens."

Asuma: "What about our rights?"

Ohta: "There is no such thing!"

A report comes in that a LABOR has lost control and is destroying residential areas. They soon set out to control the situation.

Shinshi: "Ohta-san! Citizen's life is the first priority. Do you understand?"

Ohta: "Don't you ever trust your front man?"

Driver: "Maybe we should just tell him that he should not use the gun."

Shinshi: "It's of no use. Launch him."

A LABOR with an operator inside, who is obviously shocked by his lack of control, trashes some houses and a police car. Ohta and Noa came to rescue, however the electric shock bar cannot contain the LABOR. Ohta, as always, pull his gun and shoots thru the LABORs coolant tank, freezing everything including himself. This also scraps the LABOR and keeps Asuma from further analyzing the cause of the accident.

Gotoh, Nagumo and Asuma discuss the cause of the LABOR crimes.

Gotoh says that his superiors don't think the computer is responsible for the increasing LABOR crimes - 22 already this month. There were almost none until 2 months ago. Gotoh suggests that the higher officials in the Metropolitan Police think that it must be operator error but Asuma doesn't think so.

(Two policemen take a boat along the canal to a wooden house on the bank. They go into the house and find empty bird cage.)

Noa wakes up in the night to find Asuma working on the computer to find what are the common factors in the past LABOR crime records. Gotoh is trying to talk to Shige-san in NYPD.

Asuma concludes that maybe the Operating System (OS) of the LABORs is to be blamed. Asuma reports to Gotoh next morning about his discovery. All the accidents were caused by LABORs with the Shinohara HOS installed. Nagumo counters him saying 80% of LABORs are now EQUIPPED with HOS. Asuma contends that the accidents started happening after Shinohara H.I. introduced HOS.

Gotoh: "If it's a bug, it should have been found and debugged before the government had given a release permission. What if it was not a bug, but an intended function of HOS?"

Gotoh told Asuma that the designer of the OS got his degree at MIT, came to the LABOR factory to work, and had committed suicide by jumping into Tokyo bay. They couldn't even find his body. Asuma is shocked by the news, but Gotoh continues saying that all the engineer's personal records in the computer had been destroyed. Thus they can't find out any more from the engineer. Gotoh orders Asuma not to tell anyone about his findings.

Asuma: "Why?"

Gotoh: "Don't you remember? 98 AV's operating system has been also replaced with HOS. Shige-san installed it before he went to the U.S. didn't he? However, if there is a call, we have to go out there with those 98 AV's, don't we?"

Oyaji-san tells Gotoh that he intends to visit Shinohara H.I. to check something out. Asuma volunteers to accompany him.

Oyaji-san and Jitsuyama (an old partner of Asuma's father) talk about the development of the LABOR factory, starting some 50 year ago. Jitsuyama, a manufacture manager in the factory claims that HOS can't be the cause for the crimes. Oyaji-san has other opinions about HOS.

Meanwhile, Asuma has snuck into the control room. He is copying some discs when he finds the master copy of HOS left over by E. Hoba, the dead engineer. He puts it in the computer, and the disk suddenly causes all the computers to lose control and print out "BABEL" on the screen. Jitsuyama orders the computer's power shut down to prevent the spread to other computers.

In a car returning from the factory, Asuma tells Oyaji-san that if this kind of protection was on master disk, nobody but Eiichi Hoba had an access to the inside of HOS. Nobody knows exactly what's inside the mysterious OS that is driving thousand of LABORs in Tokyo.

(Two Policemen keep on the trail left behind by E. Hoba)

Detective Matsui tells his companion that E. Hoba is a genius who left some traces as a challenge to the police, and it will be tough job to find something from such a calculated crime.

Kataoka: "Why are we doing this?"

Matsui: "Our lieutenant will not interfere with us. That's the way the system works."

Kataoka: "That's exactly what I don't understand. Why does the detective section have to operate under the security section? Who the hell is that Gotoh guy anyway."

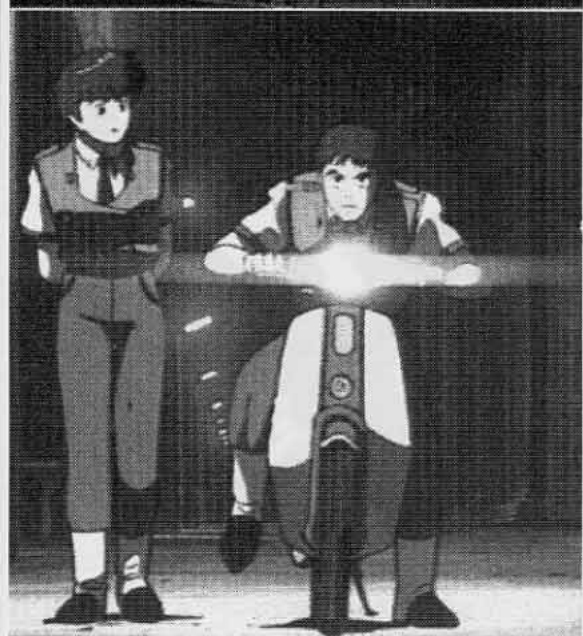
Matsui: "Known as 'Razor' Gotoh in police circles. Cool guy."

Kataoka: "Then how come he is shut out from central?"

Matsui: "He was too smart to get along."

Asuma and Gotoh find out that all the LABOR riots occurred in areas with a lot of tall buildings nearby.

Noa brings some tomatoes for everyone. Asuma comes out of the computer room and grabs Noa with a puzzled expression; they left headquarters in their uniforms. They go for a 20' pizza. Noa is obviously uncomfortable about wearing her uniform in public due to regulations. When asked how Alphonse (the nickname Noa gave to her 98AV) is doing, she gets emotional. She was outside the door when Gotoh and Asuma were talking about HOS. Asuma promises her that he will solve the crime before it gets to Alphonse. When they see a dog outside the pizza place suddenly bark up into the air, Asuma asks why, and Noa casually answers that dogs can hear some sounds that humans can't, or maybe it was the wind. Asuma seems to come up with something, borrows Noa's bike, and drives off.





Asuma goes to Jitsuyama after failing to meet his father. Asuma asks Jitsuyama what frequency could trigger the OS to lose control. Asuma concluded that it was the frequency of sound caused by the wind which set off the OS. Jitsuyama says if the story gets out, then Shinohara H.I. will be doomed. Asuma says that sooner or later, somebody will figure out the truth. "Let's not give LABORS a bad name. You grandchildren will be sad."

Asuma returns to base and finds that he had been suspended for privately using the computer room and wearing his uniform in public. The superior tells Asuma and Gotoh that Shinohara H.I. has reported to the government that HOS is causing the incidents. They jointly decided to replace HOS with the old OS. Because the effect of the news will be devastating, users will be notified of this replacement as a free upgrade. Asuma is pissed by the unfair punishment and argues with the superior.

On the way out, Gotoh tells Asuma to continue his investigation, and praises him for his good discovery. He explains why the government had to do this to calm Asuma's anger.

Asuma: "I can understand that he knew about the computer room. But how did he know about double riding of moped?"

Gotoh: "Oh that one, I let Noa confess then I informed him."

Asuma: "What?!"

Gotoh: "Because you were so tired. You needed a rest. Besides now you can concentrate on researching."

Asuma: "Captain, do you want me to follow this up further?"

Gotoh: "You are so naive, Asuma. This was too easy. I can't believe that this is gonna stop only by replacing OS."

Asuma finds out that his close friend Shige-san has returned from the U.S. to resume duty. During the conversation, Shige-san tells Asuma that he never loaded HOS on 98AV, so the machines are not contaminated. All he did was to throw in a dummy opening screen so it looked like HOS, but inside was the old OS. He is glad that he went along with his hunch but is amazed that nobody knew about it because he told Gotoh when they talked over the phone.

Shinshi: "That's captain's old trick, so Asuma will work hard to resolve the case."

Asuma: "Damn, he made a fool out of me!"

Noah: "Poor Asuma"

Asuma: "I'm gonna haunt him"

(The two policemen keep investigating the trail left by E. Hoba. They come to an old house to find a large number of empty bird cages, and an English phrase carved into the wooden wall: "He bowed the heavens also, and came down, and darkness under his foot.")

Matsui comes to talk to Gotoh about his closing the investigation, saying that E. Hoba must have some intention to do something, but the investigation has to stop now since no new leads could be found. The Chief inspector respects Gotoh's determination, and thinks that Gotoh has a heavy burden to carry on into this crime.

Gotoh starts seeing how Hoba thought and viewed things. He is still convinced that the crime wave is not over. Kanuka (from NYPD) reports to Gotoh that Hoba's nickname at MIT was 'EHOBA' (as in Jehovah), but it was not the right way to pronounce GOD. The writing on the wall, the message on the screen and the place he chose to end his life (the 'ARK' all point to the Bible. This is far from

over, and he is counting on Asuma and Shige-san to find out Hoba's plot.

Nagumo: "Are you aware of this? Whenever you talk about Hoba, you look very happy."

Gotoh: "Is that so? That's not very good."

Nagumo: "But if the thing is that serious, can we really leave it to those two?"

Gotoh: "I guess it's ok."

Asuma and Shige-san are looking at the computer file when Noa comes to see them. When Noa tries to shut off the boiling water, Asuma finds that the sound from the boiling water has created a sound wave that shakes the glass container. "Resonance! It's no use simulating each entity as a separate object. We also have to consider resonance in our simulation!". But even with this new factor in their calculations, the disturbance is still minor.

Shige: "The energy level is still too small. We need a big gang to excite the whole vibration."

Asuma: "Did we forget any construction in our simulation?"

Shige: "Well, ideally its gotta be a hollow multi-layer construction with no obstruction around."

Asuma: "There is no such building in Tokyo. Wait a minute!"

Asuma put a copy of Shinohara's database into the personal computer and finds out that only a wind speed of 40m/s (meters per second) blowing on the Ark would cause all the LABORS to riot. Shige-san was relieved since there's not likely to be a wind speed over 40m/s, but soon is shocked to find on the news that a typhoon is approaching Tokyo.

Gotoh soon reports this discovery to his superior, but they claim that the OS has been changed. Gotoh does not think it is enough of a countermeasure. Gotoh says that unless they change the path of the typhoon, change the OS or remove all LABORS from the area, Tokyo will have a disaster. The Police chief quickly makes a decision that no LABORS are allowed to operate until the typhoon passes Tokyo. Meeting is adjourned. Gotoh contends that is not enough, calling the chief's attention to the mishap of military LABOR, whose power was off when the accident happened.

Chief: "Military LABOR? What are you talking about?"

Gotoh: "Then I have another question sir: If it was the typhoon which caused destruction of the premises, nobody can be blamed for that. Can it?"

Chief: "Of course! if it was natural cause, that is beyond my jurisdiction."

Gotoh and Asuma, on their way out of Metropolitan police headquarters, are discussing the only possible way to save Tokyo. Destroy the Ark. Even though they received silent agreement from the head of police, if anything goes wrong, they have to bear entire responsibility.

SVS #2 all ready their equipment for the mission, a mission that was not approved by the authorities, a mission that will make them criminals if they fail. Asuma and Shinshi determine the only the way to destroy the 'ARK' is to initiate the fire emergency sequence from the main computer inside the 'ARK'. This will dump each of the floors into the sea.

In the meantime, Gotoh is busy plotting the aftermath activity. He is with group of naturalists who are against the BABYLON project.

He has also called in a secret weapon from the U.S. - Clancy Kanuka, EX-SVS trainee from the NYPD.

(In the storm, six SVS #2 members set off in their boat toward the small island with Gotoh and Nagumo watching from the shore)

Gotoh tells Nagumo even if they succeed, failure to prove Hoba's crime will make members of SVS#2 criminals. But if they don't do anything, they will be responsible for the rioting LABOR crimes all over Tokyo. Even if they succeed and can prove Hoba's crime, destroying the ARK will severely delay the Babylon project. Gotoh sighs saying that maybe when E.Hoba committed suicide, the consequences were decided. Gotoh orders Nagumo to take control after he leaves for the Metropolitan headquarters to buy some time for their crew members.

SVS #2 lands, and fights a battle with the guardian robots. Finally, Asuma and a member go into the main control room trying to destroy the structure using the computer. They soon find that there is someone in the roof-top control room, and the computers signals it is E. Hoba!!! Asuma sends Noa to take a look. "One more thing! We are running out of time. Purging of floors will be executed as scheduled!"

In SVS #2 headquarters, a member tells Nagumo that a report which just came in from MIT says that the diskette that they sent for inspection did contain some kind of virus which would spread to all OS. Nagumo suddenly realizes that the computer in the main control room could also be affected by the virus.

Asuma and his company are decomposing the structure floor by floor, when they find out that the wind speed has increased to 36 m/s. Some LABORS lose control and start moving around to attack.

Asuma: "Why! it's not 40m/s yet."

Shinshi: "I don't know, maybe an error in our simulation, or maybe winds are swirling inside the platform."

Kanuka finds a Typed-zero and decides to use it in spite of the warning from Asuma. "Either way, this one can become our threat. If so, then I'll try to make a use of it."

When Noa reaches the top, she finds no one - only a large group of birds.

Asuma tries to contact Noa when suddenly the computer in the main control room loses control and starts to print out "BABEL". They decide to give up the computer control and use the manual control to decompose the structure. Fortunately the manual control is located under the sub control.

Asuma: "It pays off to respect human's life. We hit a Jackpot at very last moment by sending Noa up there. The fuse is right below where she is."

Noa ignites the fuse that should decompose the structure. Despite Asuma's order to stay because there are only 30 seconds left, she opts for saving Alphonse. The entire structure of the small artificial island collapses.

When the storm ends, Noa awakes to find there is still one Patlabor out of control. As Noa is about to shoot the Type-zero, Asuma shouts to her that Kanuka is inside.

Noa: "Kanuka! Wake up!"

Kanuka: "Noa, abandon the machine and get away! 98AV can't beat Type-Zero"

Noa: "Did you pull the boot disk?"

Kanuka: "I did and hit the reset. Nothing! Perhaps the Virus is in pattern learning S-RAM and is re-generating itself."

Noa: "Where is it?"

Kanuka: "Same as 98AV, back of the neck."

Noa finally disables the Type-0. From far away, several

helicopters with Gotoh on board approach the small island....

THE END

PATLABOR - THE MOVIE CREDITS

Planning and Story: HeadGear

Conceptual Work: Masami Yuhki

Screenplay: Kazumori Itoh

Character Design: Akemi Takada

Mechanical Design: Tutaka Izubuchi

Direction: Sawai Kouji

Animation Supervisor: Kazuchika Kise

Art: Atsuyoshi Ogura

Music: Kenji Kawai

Recording Engineer: Shigeharu Shiba

Camera: Akinobu Yoshida

Layout: Takashi Watanabe, Tanaka

Color Designer: Sayuri Ike

Producers: Unosawa Noburo, Tadashi Kubo

Director: Mamoru Oshii

Patlabor, The Movie © Headgear/Emotion/TFC

120 min.; released in video on 1989/12/16 and in LD on 1990/01/25.

We are thankful to Daisuke Suzuki for his *Patlabor - The Movie* script (revised by William Chow, edited by William Y. Jang) published in *Prototype* 5: 5-31.

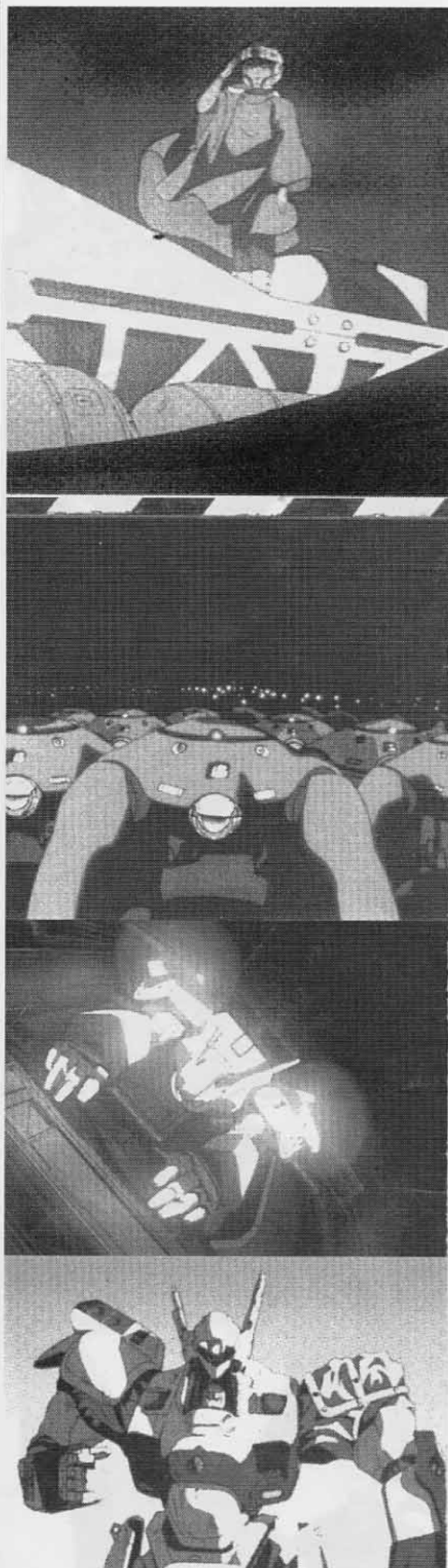
...

"This film is the last year's [1989] best Japanese action film for both animation and photography. It will definitely remain in the animation history. What makes us praise this film so much is the sincere attitude of director Oshii's to make a "real action film". He told us:

This time, I thought about what is a real action film. There are many of so-called action films, yet real one are very rare. The most important thing to create such a film is in how to bring up the process that lead to actions and the policy toward actions. In other words, the philosophy of creation. One could create a film with a bunch of actions that would thrill you without the above ingredients but he could not call it a "real action film". The original idea behind that kind of movie is to recreate the reality of the process leading to actions.

Momoru Oshii seems to have practiced his saying on this film. He shows it through the violent run-off of labors caused by a virus infection, to unravel the past of the man who instigated it, to show another face of Tokyo through it, and as an obvious ending, to show a fierce battle between all the labors. This is a creation made by a man of wonderful balance as an original writer and a star of action film maker".

Translated by Sashimi Sasaki from *Animation Video Collector's Guide 1990* (Genko-Sha Mook 27, 1990), pp. 24-25.



PATLABOR DICTIONARY

by Martin Ouellette

Hereafter, you will find a brief explanation of the technical expressions frequently used in *Patlabor*.

"ASURA" SYSTEM:

A system especially conceived by Schaft Enterprise, Japan, for the now famous type J-9 "Griffon" Labor. It consists of a helmet directly linked to the mecha's computer encasing a "virtual cockpit" system, which means that all the informations necessary to the pilot are displayed inside the helmet. This system also permits the head of the labor to follow the movements of the pilot's head. But the best feature of all is that the images the pilot would see on multiple viewing screens in a normal labor cockpit, are actually seen inside the helmet, giving the pilot the strange feeling of being the labor himself!! The "Asura" system is the main reason for the Griffon's incredible hand to hand combat ability, for pilot and mecha are (nearly) as one.

"DOHC" ENGINE:

Means Dual Over Head Cam. It's nothing more than an advanced piston engine, used in work labors. It should be mentioned that this type of engine already exists.

"ECM" SYSTEM:

Electronic Counter Measures system. A system designed to confuse enemy electronic detection systems. Actually in use on military aircrafts and helicopters.

FLIGHT BACK PACK SYSTEM:

Especially designed for the J-9 "Griffon" Labor, this system consists of two turbo reactor engines, equipped with after-burners, and two movable wings for aerial maneuverability. The back pack is very light, being made of composite plastic (fiber reinforced plastic) and light alloys. It can be ejected if need be. A different model is mounted on the R13EX "Phantom" Robot. The "FBP" system is a vital part of the "Griffon" project.

"GSG-9" ARMOR:

Equips the 7B/2B "Brocken" Labors used by that famous German Counter-Terrorists Squad. It consists of an alloy "vest", which is snapped on the Labor's torso and shoulder units. The "vest" is impervious to weapon fire up to 40 mm caliber. A helmet is also comprised in the kit, manufactured by Schaft Enterprise, Europe.

"HUD" SYSTEM:

Head-Up Display System. The same system is found in the cockpit of modern jet fighters. In *Patlabor*, it is used on many mechas (chiefly the AV-98 "Ingram") when the pilot operates the Labor with his or her head outside the cockpit, which means about 90% of the time.

"HNS" SYSTEM:

Hyper Nerve System. Acts as the nervous system of the machine, permitting great speed as well as extraordinary precision of movements. Conceived by Schaft Enterprise, Europe, this system eclipses in efficiency and reliability the "HOS" system designed by Shinohara for its AV-X0 "Type Zero" prototype Labor.

"HOS" SYSTEM:

Hyper Operation System. Eiji Hoba, chief computer programmer for Shinohara is responsible for the researches on this more primitive version of both "HNS" and "NNS" systems. The "HOS", designed for the AV-X0 "Type Zero" Labor, is nothing more than extremely advanced computers using superconductive technology and special programs, which process informations much faster than ordinary computers and programs, allowing an exponential increase of maneuverability and speed of movement, when compared to the AV-98 "Ingram".

HYDRAULIC RETRACTABLE HAND SYSTEM:

This system permits the labors equipped with it to grab their firearms with great speed and minimal movements, thus minimizing the stress on the frame. It is also used in hand to hand combat as a "power punch" (a AV-X0 "type zero" specialty), extending the reach of the hand by nearly 1.5 m. A nasty surprise!

LABORS:

Giant, metallic humanoid machines first used for construction on the "Babylon Project". Soon, they became tools of terror for the bandits and terrorists, forcing the police to use them as well. Of course, the military did not ignore this wonderful new technology and began to work on their own Labors. The Labors are never smaller than 5.5 m and rarely taller than 12 m. Their weight may vary between 6 and 15 tons (bigger ones are known but rare) and the number of legs may also vary (from 2 to 6).

MAXIMUM WEIGHT LIFTING CAPACITY:

The maximum weight a Labor can lift without rupturing its articulations and frame.

"NNS" SYSTEM:

Neuron Network System. A more advanced version of the "HOS" which, instead of superconductors, employs neurons to channel information towards the computers. Faster than anything ever conceived (even the "HNS") the "NNS" nevertheless has a flaw: its tendency to overheat easily. The AV-0 "Peacemaker", Shinohara's latest offering in police Labors, is equipped with this system.

MINIMUM REVOLVING RADIUS:

The smallest surface a Labor uses to turn on 360°.

SENSOR ARRAY:

Also known as "Sensor Pack". This is the name of the entire range of sensors used by a mecha. That usually consists in radio, radar, infrared, thermo-imager, night vision optics, external audio pick-up and video surveillance system.

SENSOR CAMERA:

Situated in the head, those are the eyes of the mecha. They usually consist in two camera units (one principal, one backup) equipped with various optical systems such as infrared, thermo-imager and night vision optics.

SENSOR PODS:

Made of light but strong alloys, they protect the antennae and scopes. In *Patlabor*, they often take the appearance of big rabbit ears.

SHIELD:

Used by military and police Labors, they come in all sizes and shapes, from the AV-98 Ingram's small hand to hand combat type to the nearly full body protection given by the MPL-97S "Python" riot Labors. Made of extremely strong and light alloys (can be made of composite plastics).

VIEWPANE:

Often made of armored, bulletproof glass, these are protecting the sensor cameras placed in the head of the mecha. Sometimes, they even resemble the shape of a car windshield. A case that comes to mind is the AVS-98 "Economy Type" patrol Labor.





PATLABOR CHARACTERS

by Martin Ouellette

Noa Izumi: The Principal character of *Patlabor*, Noa is quite a piece of work! She's also the pilot of the Ingram No 1, which she named "Alphonse" after her beloved

Principal characters

NOA IZUMI



family dog. Enthusiastic, determined and sometimes a bit childish, it seems to everyone around her that she cares only for her Labor, which is certainly not the case. Noa maintains a deep feeling of friendship (and maybe more) toward Asuma Shinohara, her field commander and best friend. Cute, charming and winsome, with a boyish haircut and big blue eyes, Noa is not the kind of girl that likes to be ignored, least of all by her father, who thinks that the police is not the kind of occupation for a girl. And she certainly tries everything in her power to prove him wrong. Noa was born in Toma Kumae, Hokkaido. She grew up there, and still goes there for her vacations.

ASUMA SHINOHARA



Noa Izumi's backup, Asuma is the son of the president of "Shinohara Heavy Industries". Asuma's relation with his father is certainly not on the sunny side, far from it! In fact, his presence in the police force was caused by his father, who tricked him into enlisting and then, had him assigned to section 2, primarily out of spite. One of the reasons for this feud would be Asuma's negative position about two things that his father admires: the "Babylon Project", and the military. Asuma was named in honor of the Gunma Prefecture, ancestral home of the Shinohara family. He currently lives in Tokyo.

ISAO OTA



Ota is the pilot of the Ingram No 2. Overzealous, loud and slightly insane, he venerates only two things: Justice and heavy fire power. His sense of honor being wounded quite easily, he often loses control and gets himself in bigger trouble than he can handle. His tendency to use irresponsible gunplay certainly

doesn't help his case in any way. In fact, he loves weapons so much that he had Shigeo Shiba, section 2's armorer, built him a special 90 mm shot gun, known as the "Riot Gun", which he uses profusely. Restraint doesn't seem to be a part of his genetic makeup.

CAPTAIN KIICHI GOTO



Boy! Does this guy ever look bored! But under that low lided gaze of his, Goto is extremely intelligent and quick minded. He's just like an old fox who knows all the tricks and simply isn't impressed by anything anymore. His "don't get excited" personality is the perfect foil for section 2's bunch of excited brats. But as far as his lovelife is concerned, he's got a problem. Shinobu Nagumo, his dream sweetheart, is the captain of section 1 and isn't really interested in any personal relationship with him. But Goto is a patient man!

KANUKA CLANCY



Kanuka Clancy: Chief of the investigation section of the New York Metropolitan Police Department, Kanuka is the perfect police officer. Intelligent, resourceful and sharp as a whip, she often seems cold and unfriendly but that is only a camouflage for her fiery spirit. Kanuka joined Section 2 after successfully completing a mission given to her by the N.Y.M.P.D. and from that moment on, a certain rivalry surfaced between her and Noa Izumi. Her family are third-generation Japanese from Oahu, Hawaii. In the animation, Kanuka is always present, lending a touch of class to a parody like atmosphere.

SHINOBU NAGUMO



Shinobu Nagumo: The chief of Section 1, (the elite of the special vehicle division) Shinobu is a serious woman, as good a police officer as Kanuka but much more conscious of her rank and quality. Probably too much conscious. She's being chased after by Kiichi Goto (captain of Section 2), whom she considers to be both her professional and social inferior. That doesn't mean that she's not warming up to his thoughtful and delicate courtship, on the contrary. The barriers won't be holding up for long between those two! At first, Shinobu is disdainful of Section 2's motley crew and even hates their guts because they are the ones receiving the new labors. That feeling doesn't last for long, though and Shinobu learns to like that bunch of weirdos.

Secondary characters

MIKIYASU SHINSHI



Mikiyasu Shinshi: Mikiyasu is Ota's back-up and field commander. He must often be called upon to restrain his trigger happy comrade from indulging in his fondness for nutzoid gunplay. Nobody should judge Mikiyasu from his weird looks. He's got temper that explodes only once a year. But what an explosion! He's the only member of Section 2 who has the good fortune (?) of being married but sometimes he strongly wishes he'd never tied the knot, for his wife (who likes to exteriorize her feelings a lot!) is somewhat jealous of the time he spends with her.

HIROMI YAMASAKI:



Hiromi Yamasaki: Hiromi is the gentle giant of Section 2. Too big to fit into most labor's cockpit, Hiromi is, sadly, in the obligation to assume something of a back up role. A native of Okinawa, he's a shy and unobtrusive man who doesn't seem to be interested in making too many waves. But when he talks, everyone listens! They figure that if someone as usually silent as Hiromi has something to say, then the situation must really be desperate! Hiromi lost his father when he was very young and his mother, a strong willed little woman, had to raise him all by herself.

SHIGEO "SHIGE" SHIBA AND SEITARO SAKAKI



Shigeo "Shige" Shiba: Section 2's armorer and labor mechanic in second, Shigeo is as excitable as his boss, Seitaro Sakaki, is stoic. He tends to go hysterical on tense situations and freaks on high tech gadgets such as his "oxygen-destroying bomb" and the 90 mm "riot gun" which took him four months to construct. Shigeo is also a master computer programmer, a skill he uses with great proficiency in "Patlabor: the movie".

Seitaro Sakaki: Chief mechanic and "Mecha Master" of Section 2, Sakaki is a veteran engineer who loves toying with new ideas. His "nuts and bolts" approach to mechanical and engineering problems is legendary. Laconic, with his eyes eternally hidden behind mirror sunglasses, he often thinks about the good old times, when he was one of the chief engineers working on labor development. He likes to give advice based on his many past experiences. In the animation, he's always present but rarely heard. If you look for him, you'll find him sitting near the sea, under a white and red beach umbrella.



ACTUATOR SYSTEMS

by Dominique Durocher

Here is the second in a series of articles explaining the basics of the engineering behind mecha. In this installment, actuators are the main subject.

There are four types of actuators: pneumatic, hydraulic, electro-mechanical and polymeric. The first two involve the use of a moving fluid, the third is a conversion of electricity into mechanical force, and the last is a peculiar application of plastic fibres.

PNEUMATIC SYSTEMS

A pneumatic actuator uses a compressed gas to push or pull a piston. This piston can be attached to a lever mechanism or to trigger electrical relays. The force with which a piston can push is a function of the surface of the piston and the pressure within it. If the available space limits the size of a piston, a greater force will therefore require a greater pressure. This is the major problem of pneumatic actuators. Since gases are compressible, they occupy less space at higher pressures, the required pressure increases far faster than the force they produce, and so does the quantity of gas within the system. This usually limits pneumatic actuators to relatively lower power applications like opening panels or pushing surfaces (like brake pads) into contact. Pneumatic pistons can generate quite high forces as I have seen in some printing machinery, but can rarely sustain such forces. It is still insufficient in relation to those involved in moving multi-ton machines around. The one advantage of air-filled pneumatics is that they simply acquire it from the outside atmosphere and do not require any storage containers.

Another use of pneumatic pistons is for energy dissipation, as in shock absorbers. In this case, the gas simply passes from one side of the piston to the other either through small holes in the piston end plate or through an external pressure limiting circuit. A sudden movement of the piston forces the gas to pass through either limiting system and the pressure increases, slowing the piston as it resists. This resistance changes some of the force into heat, which must be dissipated, which is simpler with an external pressure limiting circuit. Gas pistons are not normally used purely for shock absorption but as a damper in conjunction with some form of spring, keeping the latter from rebounding on forever.

HYDRAULIC SYSTEMS

Hydraulics are basically similar to pneumatics in that a fluid transfers forces from one part of the system to another. The main difference is that instead of using a gas as the active agent, it is a liquid. Liquids are not compressible, meaning that if you push a one liter volume into a piston, it will force the piston out by the amount necessary to open up one liter within. This, and the little loss of energy through friction and valve interference, makes hydraulic actuators a perfect power transfer system.

Hydraulic systems can generate linear movements, using pistons, or torsional forces with rotors. These rotors can either have an unlimited or finite angular travel. The interesting thing about rotors is that reversing the fluid flow will reverse the rotor motion with no loss of force or efficiency. Unlike rotors however, pistons are more effective in one direction than the other because on one side, the rod occupies some space that cannot be used to apply force. Robots use hydraulic rotors almost exclusively for most joints.

On the Ingram for example (see the partial cutaway), all the arm and leg flexions and rotations are generated by finite-travel rotors, except for the shoulder front-to-back and up-down motions. Robots have often been represented with off-axis pistons to create the bending movements, as is the case with C-3PO and the Terminator models. This is also a viable solution but requires a greater number of flexible linkages.

The head mounting and torso-abdomen attachments are six-axis, six-piston arrangements similar to those used on flight simulators. This system allows for a complete motion range. The hands also make extensive use of rotors. The wrist is an unlimited-travel type that allows the twirling motion required for some offensive actions and each finger joint uses a 90 to 135 degree limited rotor. All these rotors are fed by hydraulic pumps and reservoirs located in the backpack (not shown) as well as many booster pumps, valves, overflow reservoirs and heat exchangers disseminated in different areas of the mecha.

The main disadvantages of hydraulic systems is the quantity of support hardware they require. This is particularly true of fluid storage since a large volume is required at all times and it is impossible to completely eliminate leaks. Such a system would basically be a closed loop, with the fluid going from the storage reservoirs through the pumps and valves directing it through the appropriate actuators and then back to the reservoirs. Once the system reaches the complexity required to reproduce humanoid movement, it will need many bleed tanks, auxiliary pumps and boosters. These can substantially increase the weight and volume of the system.

ELECTRO-MECHANICAL SYSTEMS

Electro-mechanical actuators are probably the best known: they are simply electric motors. They produce force by the interaction of the electric field generated by a series of static coils (the stator) on mobile coils (the rotor). This interaction causes the rotor to, as its name says, rotate around an axis that can be connected to any mechanical device.

This type of actuator has a very high efficiency, often in the order of 95 to 98 percent at its designed speed and load. Unfortunately, this efficiency drops off sharply when either the load or the operating speed deviates from the norm. They also require extremely high currents for low-speed high torque applications, which can easily overload any power source. Another problem is that electrical motors are designed for a specific operating rotational speed. When this speed is not maintained, not only does the efficiency drop as it has already been mentioned, but so does the force generated. To maintain this optimal speed at all times would require complex gear systems. The total system would be too heavy and require so much maintenance that it could not be kept operational very long in the field.

There are also electro-mechanical actuators that function in a purely linear fashion. These are called linear induction motors and are similar in principle to a rail-gun or coil-gun. They basically resemble a stretched out motor, with the coils unwound and the rotor being inside the stator loops. I know of these being in prototype form, but I have yet to see an operational linear induction motor.

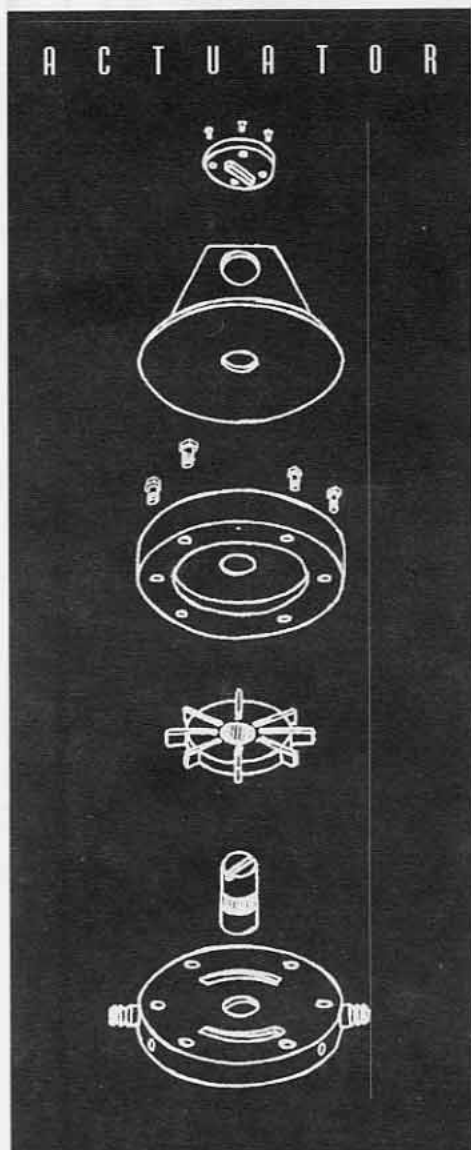
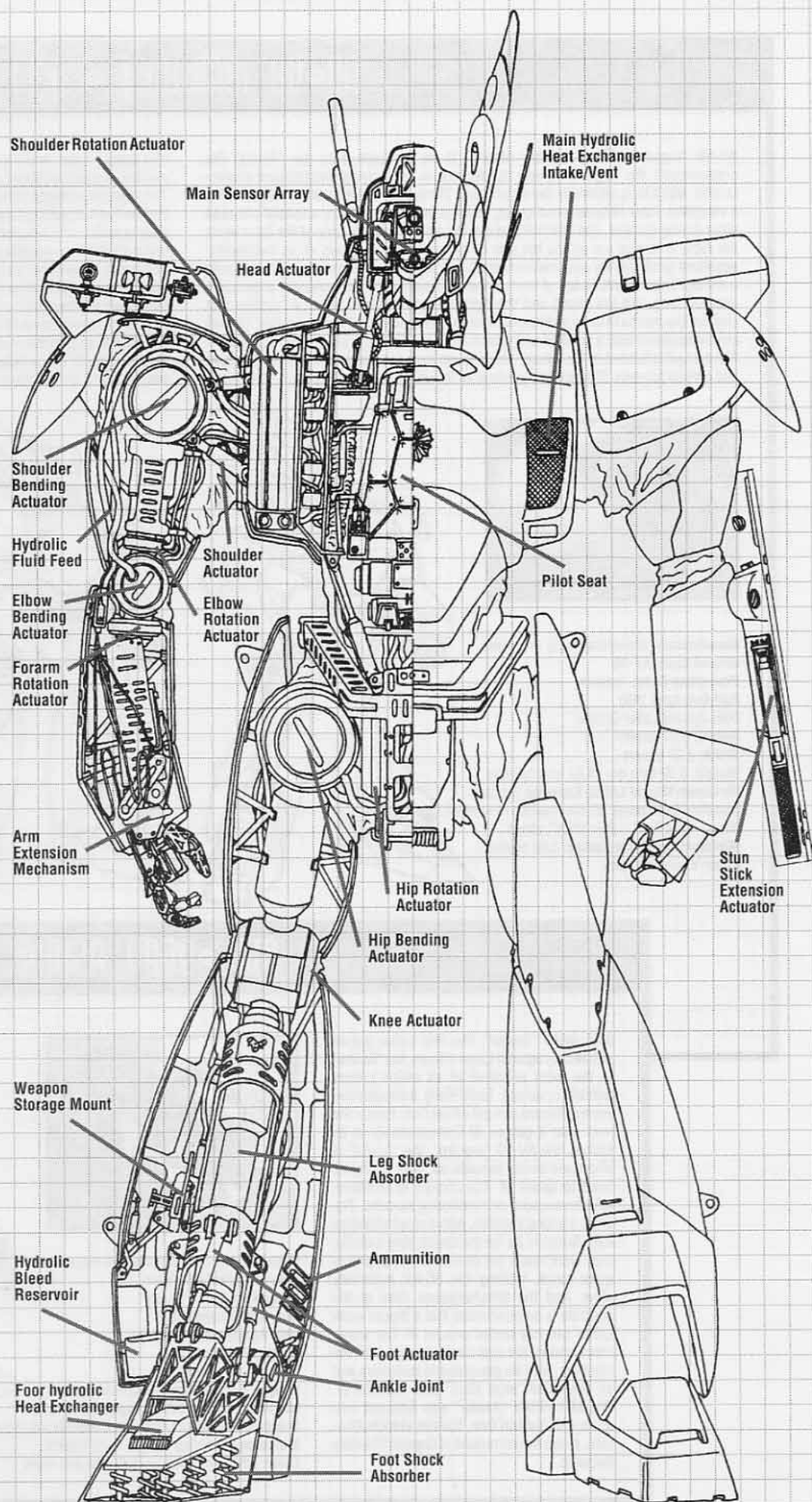
POLYMERIC SYSTEMS

Polymeric actuators are used only in a few environments: that of the Battletech game world and for the android Data from Star Trek: TNG. In Battletech, they are called myomers. The principle is that, when subjected to an electrical current, certain plastic (or polymer) fibres contract, creating a tractive force on the loose end of the fibre. If this sounds like an artificial muscle, it may be because that is not far from the truth. The muscle's action is electro-chemical in origin where that of the myomer is purely electrical. Attaching the myomer to rods can generate linear movements, winding it around a pulley permits to obtain torsional forces.

This may seem far-fetched. After all, plastics are non-conductive, they block the passage of electricity, and who has ever seen a plastic jar change shape when electrified? Well, hold on to your socks because myomers exist, more or less. By implanting certain impurities into a polymer matrix, it is possible to make them conductive. This is presently a subject of research for a number of applications. And more importantly, some plastics have been

observed to contract under the influence of an electrical field. Unfortunately, this contraction is in the order of one hundredth of a percent (0.01%). At that rate, it would require about 10 kilometers (6.25 miles) to obtain 1 millimeter (the thickness of a dime) of displacement. There is also the low strength of the plastics to contend with. Although there is some research going on to make these applicable to prosthesis, considering the three and a half centuries in the Battletech history before such usable systems are developed, that makes the idea quite plausible for the game.

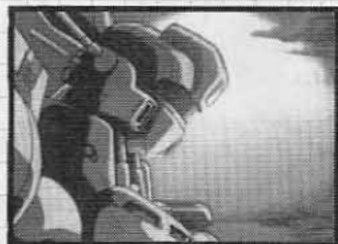
Mecha designs have evolved a great deal in the past, going from largely gear-jointed robots of the sixties and seventies, to the hydraulic piston and rotor powered mecha of PATLABOR. They have followed a growing trend towards greater realism, up to the point where they seem almost feasible. Of course, there are a number of experimental technologies involved, mainly where Labors are concerned since the time differential is negligible. But the subject of research today will be commonplace soon, perhaps as soon as tomorrow. Just look back a century and see.



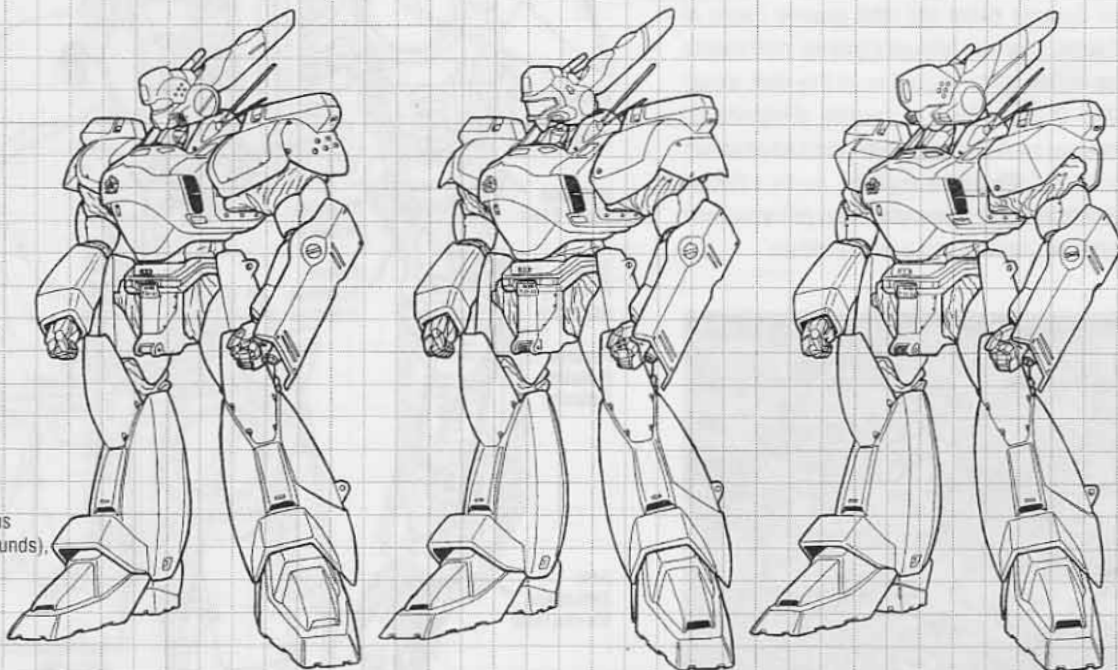
AV-98 "INGRAM" (1-2-3)

AV-98 "Ingram": "The" Patlabor Mecha! If we compare it to the "Asuka" (its predecessor), the "Ingram" is very tall! Its head is certainly its predominant characteristic, with a long rabbit ear-like sensor pod. The sensor cameras are situated behind a viewpane made of bullet proof glass, which is itself protected by a special armored visor during combat. The telemetric antennae are on the right side of the head while the radio antennae are on the left side of the neck, which shows all its mechanical actuators (probably for easy maintenance). The shoulder units are well armored, with a red signal lamp unit on top of each of them. The arms are as humanoid as possible (not too long, not too short) and the right one possesses a hydraulic system that enables the mecha to draw its firearm from any position except while running. The left arm is equipped with a small shield, which conceals the "stun stick" (see dictionary). The cockpit is located in the torso, which opens in two sections to reveal the pilot seat and control screens. The seat can be elevated in such a way that the pilot, with the help

of a special hatch and head-up display, can operate the Labor with his or her head outside. A winch is placed on the mecha's crotch, for rescue operations and escalade. The legs are strongly built, to withstand all the punishing tasks the machine has to endure from street fighting, riot control and patrol operations. An armored compartment is built on the exterior side of each lower leg, the right one containing the revolver and the left, the ammunitions. The armament consists in: a 37 mm revolver, a 90 mm riot gun, a "stun stick" and a small shield (see dictionary for the first three). It should be mentioned that there are three types of "Ingrams", being differentiated only by their head and shoulder units. There's the "Ingram No I" (Alphonse), "Ingram No II" (specially retrofitted for ISAO OTA) and "Ingram No III", which seems to be a slightly updated version of the first two. The "AV-98 Ingram" was put on active duty in 1998 and "Section 2" of the Special Vehicle Division, commanded by Captain Kil Chi Goto, were the first to use those Labors.

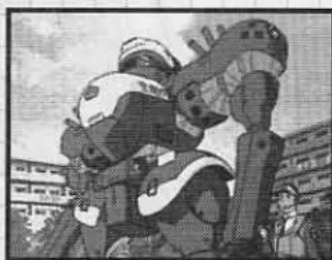


Manufacturer: Shinohara Heavy Industries
Official Code: AV-98
Production Code: "Ingram"
Roll Out: April 1998
Use: Against Labor Crimes
Height: 8.02 meters
Width: 4.37 meters
Weight: 6.02 tons dry / 6.62 tons full load
Maximum Weight Lifting Capacity: 2.4 tons
Standard Equipment: 37mm revolver (6 rounds), 90mm "Riot Gun", "Stun Stick", shield
Minimum Revolving Radius: 3.90 meters
Color: White and black

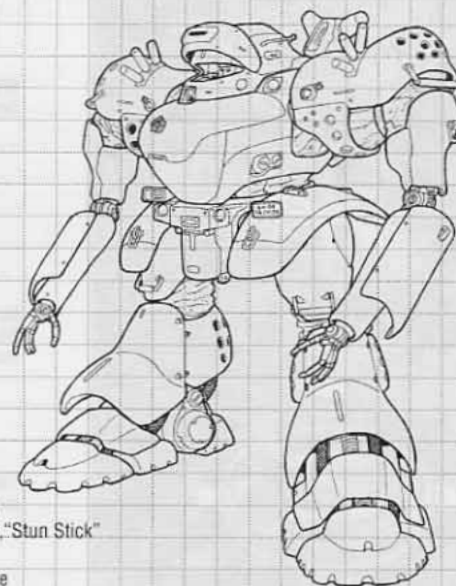


MPL-96AV "ASUKA"

MPL-96AV "Asuka": The first Labor put on active duty against Labor crimes, the "Asuka" is the most primitive of all police Labors actually in service. Technically, it should have been reformed and put off the Duty Roster the very year it got on it! Comparatively to its sibling, the AV-98 "Ingram", the "Asuka" is short and broad shouldered, with nearly no head to speak of. The cockpit is primitive, with no sensors or monitoring screens. The arms are long and thin, with a small shield on each forearm. As for the hands, they look like they were made out of wires! The engine is quite small, making the 96-AV extremely slow. And the time/response ratio of the controls is so ponderous that a bigger work Labor can run circles around it! The armament shows the riot control origins of the machine, with six gas grenade launchers and an electrified "stun stick" (see dictionary). The MPL-96AV "Asuka" was first put into service in Section One, Special Vehicle Division, under the command of Captain Shinobu Nagumo.



Manufacturer: Shinohara Heavy Industries
Official Code: MPL-96AV
Production Code: "Asuka"
Roll Out: October 1996
Use: Against Labor Crimes
Height: 5.62 meters
Width: 4.60 meters
Weight: 6.08 tons dry / 6.89 tons full load
Maximum Weight Lifting Capacity: 1.2 tons
Standard Equipment: Grenade launchers x 6, "Stun Stick"
Minimum Revolving Radius: 5.20 meters
Color: White and black or dark gray and white

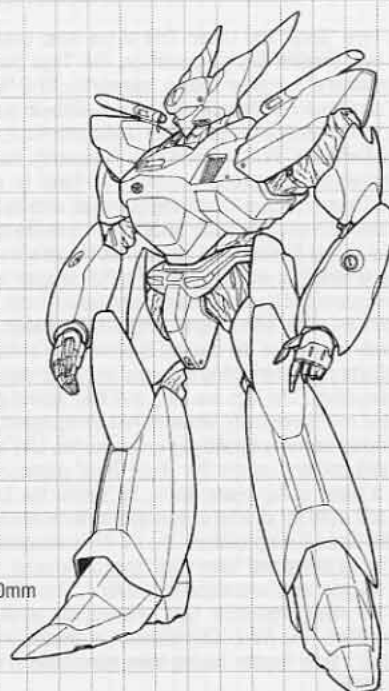


AV-0 "PEACEMAKER"

AV-0 "PeaceMaker": The "PeaceMaker" is the mass production model of the now famous AV-X0 type "zero" prototype Labor. Slightly bigger than the AV-98 "Ingram", the AV-0 also has a more high-tech look. The "PeaceMaker" is also equipped with more sensor gear than most of the other police Labors. Many of those sensors are concealed in two rabbit ear-like pods mounted on each side of the head and the cameras are protected by a bullet proof viewpane. In fact, the head is a hybrid of AV-X0 and AV-98. The shoulders are broad, with modified red signal lamps on top of each of them. Contrarily to the "Ingram", the 37 mm revolver and its ammunitions are inside the torso, on each side of the cockpit, the revolver on the left side and the ammo on the right. That kind of disposition means that the "peace maker" can grab its firearm while running, something the "Ingram" cannot do. The legs are long and thin, permitting extremely long strides and very good maneuverability. The AV-0 is also equipped with the "NNS" system (see dictionary), giving the mecha an astonishingly short time/response ratio as well as an extremely reduced minimum revolving radius. The armament consists of: a 37 mm revolver, a 90 mm riot gun, a "stun stick" (concealed in left forearm and a large shield (see dictionary for the first three). The AV-0 will be put into service in February 2000.



Manufacturer: Shinohara Heavy Industries
Official Code: AV-0
Production Code: "Peacemaker"
Roll Out: February 2000
Use: Against Labor Crimes
Height: 8.20 meters
Width: 4.45 meters
Weight: 6.10 tons dry / 7.00 tons full load
Maximum Weight Lifting Capacity: 2.8 tons
Standard Equipment: 37mm revolver (6 rounds) , 90mm "Riot Gun", "Stun Stick", Large Shield, "NNS" system
Minimum Revolving Radius: 3.00 meters
Color: White and black



SENSOR DICTIONARY

This is the list and short description of the sensory equipments used by the Labors.

COMBAT COMPUTER: Calculates, stores, and transmits data onto the cockpit computer screen or head up display (HUD). Patches in with targeting computer.

TARGETING COMPUTER: Assists in the tracking of enemy targets.

TELESCOPIC OPTICAL ENHANCEMENT SYSTEM: range of 600 m, field of vision of 6 m.

SHOULDER SPOTLIGHTS: range of 200 m

LOUDSPEAKERS: can amplify the pilot's voice up to 90 decibels

INFRARED SPOTLIGHT: range of 600 m. It emits an infrared light beam that is sensible to the normal eye. Smoke impairs vision.

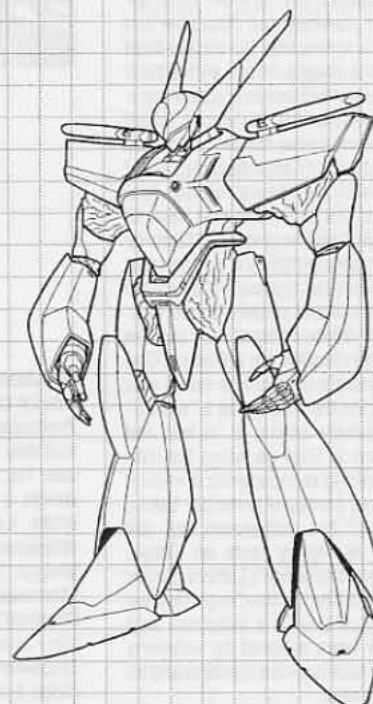
THERMO-IMAGER: range of 600 m. A special optical heat sensory unit that allows the infrared radiation of warm objects to be converted into a visible image. It also enables the pilot to see in darkness, shadow, and through smoke.

NIGHT VISION OPTICS: An image intensifier that is passive, meaning that it emits no light of its own, but relies on ambient light which is electronically amplified to give a visible picture. Night vision cannot work in absolute darkness (but infrared and thermo-imagers can).

AV-2 (AV-X0) "CLASHBUSTER"

AV-2 (AV-X0) "ClashBuster": This is the Labor used by the New York Metropolitan Police Department to control Labor crimes. Slimmer than the AV-0, the "buster", as it is often called, is also taller by 12 centimeters and bears an immense resemblance to the AV-X0 prototype police Labor. The only differences between the two being a full face armored visor, longer "ears" (the sensor pods), the armament and the paint job, which is blue, like the signal lamps. The 37 mm revolver is replaced by a 44 mm Magnum autocannon. Of course, the "stun stick" (see dictionary) and the shield are still present. The "Clash Buster" being an off shoot of the AV-X0, there's a strong possibility that officer Kanuka Clancy, first pilot of the type "zero", was the instigator of the decision taken by the N.Y.M.P.D. to buy those Labors. The AV-2 was put on the duty roster in September 1999.

Manufacturer: Shinohara Heavy Industries
Official Code: AV-02 (modified AV-X0)
Production Code: "ClashBuster"
Roll out: September 1999
Use: Against Labor Crimes
Height: 8.32 meters
Width: 4.51 meters
Weight: 6.21 tons dry / 6.98 tons full load
Maximum Weight Lifting Capacity: 3.02 tons
Standard Equipment: 44mm "Magnum" autocannon, "Stun Stick", Large Shield, "HQS" system
Minimum Revolving Radius: 3.20 meters
Color: Blue with white markings



AV-X0 TYPE "ZERO"

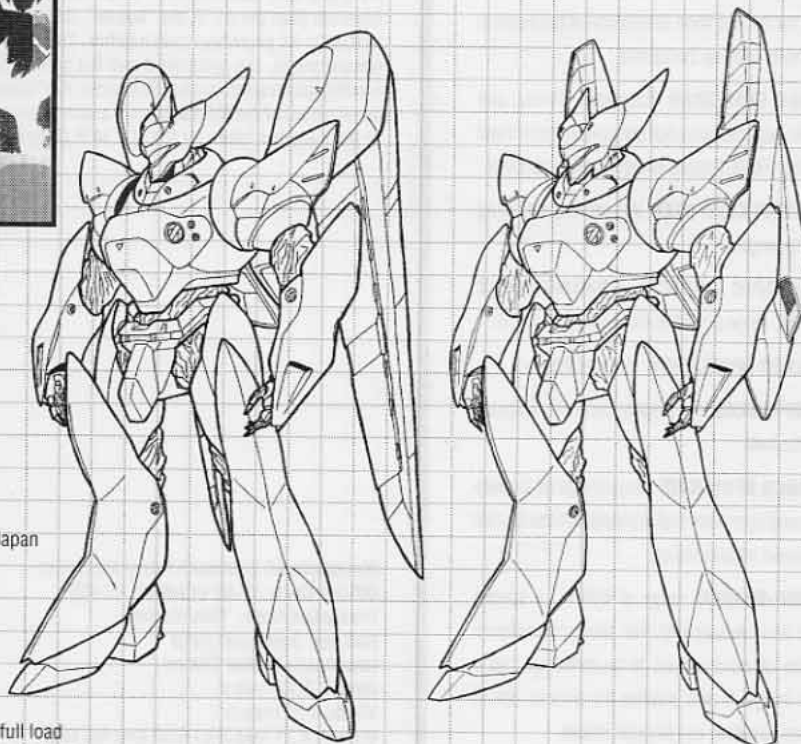
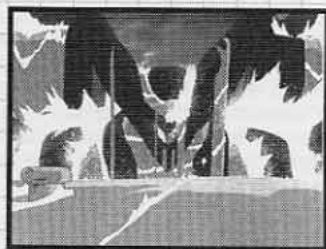
AV-X0 Type "Zero" test Labor: One of the most beautiful mecha ever created! Being a prototype, the "Type Zero" is also the father of two other Labors, namely the AV-2 "Clash buster" and the AV-0 "PeaceMaker" which will be in service shortly in many police forces. The AV-X0 was the first Labor equipped with the "HOS" system (see dictionary), making it an extremely dangerous opponent in hand to hand combat. The mecha is quite striking to look at, with its head being fitted with two big sensor pods, which look like rabbit ears. The sensor camera (that looks more like an eye when cowlings is lifted) is situated behind a "U" shaped bullet proof viewpane and is very well protected from shocks. The shoulders are wide, with a signal lamp on top of each. The main body is thin but the cockpit is powerfully armored, being able to sustain crippling damages and still protect the pilot adequately. The legs are long and thin, giving good speed and maneuverability, while the feet are equipped with special soles, allowing a good grip on any terrain. Like every police and military Labors the "Type Zero" possesses a winch, a piece of hardware dating far before the Labor period and used for all kind of operations, from rescue to escalate. Since it is a prototype, the AV-X0 is weaponless, except for its shield and "stun stick" (see dictionary). Only one AV-X0 type "zero" was made and the AV-0 "PeaceMaker" will be the mass production type, entering the service in February 2000. The AV-2 "ClashBuster" is already on the N.Y.M.P.D's Duty Roster, having been introduced in September 1999.



Manufacturer: Shinohara Heavy Industries
Official Code: AV-X0
Production Code: "Zero"
Roll Out: By the end of 2000 as "AV-0 Peacemaker"
Use: Test Type Patrol Labor
Height: 8.32 m
Width: 4.51 m
Weight: 6.21 tons dry / 6.68 tons full load
Maximum Weight Lifting Capacity: 3.2 tons
Standard Equipment: Large shield, "Stun-Stick", "Hos" system
Minimum Revolving Radius: 3.2 m
Color: White and black

"TYPE J-9 GRIFFON"

SEJ "Type J-9 Griffon": With the "UHU", this is one of the most technically advanced (and certainly one of the less known) Labor ever made. The "griffon" wears its name perfectly, with an incredible aura of mystery attached to it. Black as midnight, with a red viewpane for its sensor cameras, the "griffon" often appears from nowhere and disappear just as easily. It seems that the design itself was made to inspire terror, with a head unit no less than demonic in appearance, flared shoulders, hips, lower legs, and of course, its exclusive feature: immense wings, for this is a Labor designed to fly! Equipped with the "Asura" system (see dictionary), the time/response ratio of the controls is so low (nearly instantaneous) and maneuverability is so great that no other Labor can approach it. Since the "griffon" is a secret project, details concerning its armor composition and the reason of its creation are unknown. One of the possibilities would be that it was conceived for the military as a "stealth" Labor. But there seems to be less and less reasons to think so, since the military did nothing to recuperate it when it was stolen by a group of terrorists. Lately, the "Griffon" has reappeared and still continues its nightly raids on Tokyo, where the mobile police's Labors simply cannot stop it. The "griffon" is also known as the "Black Devil", a nickname that shows the fears harbored by everyone who has to face both the machine and its mysterious pilot.



Manufacturer: Schaft Enterprise Japan
Official Code: Type J-9
Production Code: "Griffon"
Roll Out: Unknown
Use: Test Type Labor
Height: 8.55 meters
Width: 4.60 meters
Wingspan: 17.55 meters
Weight: 7.15 tons dry / 8.00 tons full load
Maximum Weight Lifting Capacity: 3.50 tons
Standard Equipment: Flight Back pack system (Turbojet x2, after-burner equipped), "Asura" system
Minimum Revolving Radius: 4.00 meters
Color: Extremely dark blue

5G/C "GRAU BEAR"

SEE Type 5G/C "Grau Bear": One of the ugliest Labor ever designed, the "Grau Bear" is also one of the widest, with its 6.43 meters at the shoulders. For a military Labor, the armament isn't very impressive because there isn't any! Of course, technically, the three-fingered hands could be used to punch or crush another Labor. But, in hand to hand combat, the "Bear" is slow, with an exceedingly high time/response ratio and minimum revolving radius. Conceived and used by military personnel, its look wasn't really taken into account during development. Equipped with a small sensor camera, the "Type 5G/C" also has a certain difficulty knowing where it's going. This Labor is definitely not a good representation of what "Schaft Enterprise Europe" (SEE) can come up with. The "Grau Bear" began its service in October 1997.



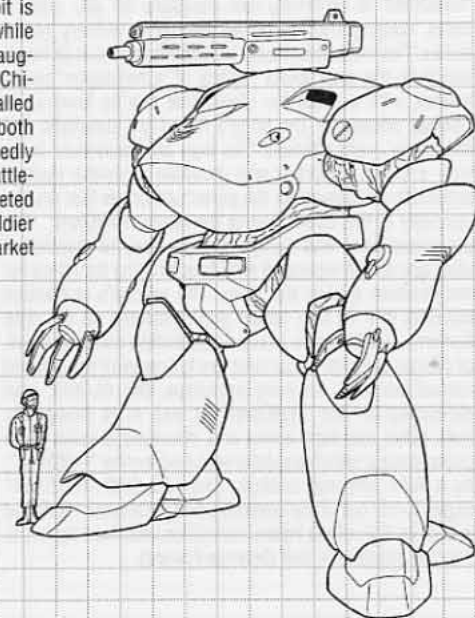
Manufacturer: Schaft Enterprise, Europe
Official Code: 5G/C
Production Code: "Grau Bear" (Grey Bear)
Roll Out: October 1997
Use: Military Labor
Height: 7.68 m
Width: 6.43 m
Weight: 8.02 tons dry/ 8.19 tons full load
Maximum Weight Lifting Capacity: 2.6 tons
Standard Equipment: none
Minimum Revolving Radius: 5 m
Color: "camo" green



6Q/2C "CHIMAERA"

SEE Type 6Q/2C "Chimaera": Although still primitive in design and equipment, the "Chimaera" is a far cry from its ancestor, the "Grau Bear". Visibility from the cockpit is much better, with a large armored glass viewpane while speed, and maneuverability have been tremendously augmented. Fire power has also been dealt with, the "Chimaera" being equipped with a 40 mm autocannon installed on the right shoulder. The hands have been upgraded, both in flexibility and ability. The "Type 6Q/2C" has supposedly been replaced by the "Type 7B/2B Broken" on the battlefield but is still used by many third world and low budgeted countries around the world as a main battle and foot soldier Labor. The "Chimaera" was introduced in the world market by "Schaft Enterprise Europe" (SEE) in 1997.

Manufacturer: Schaft Enterprise, Europe
Official Code: 6Q/2C
Production Code: "Chimaera"
Roll Out: Late 1997
Use: Military Labor
Height: 7.10 m
Width: 4.35 m
Weight: 6.99 tons dry/ 7.22 tons full load
Maximum Weight Lifting Capacity: 4.3 tons
Standard Equipment: 40 mm autocannon
Minimum Revolving Radius: 4.95 m
Color: Dark Green/ Light Grey

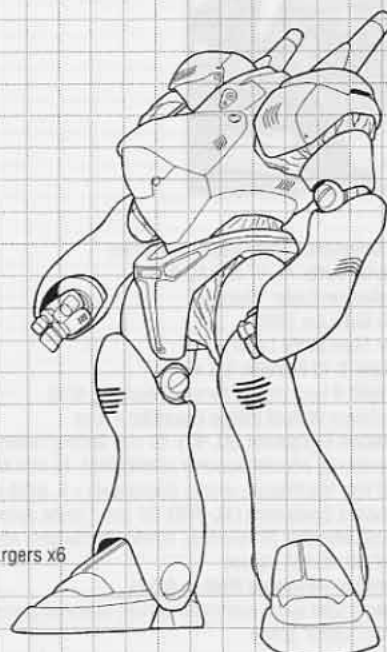


7B/2B "BROCKEN"

SEE Type 7B/2B "Broken": The foot soldier of the Labors, the "Broken" is heavily armored and is often used as a tank support unit. Smoothly shaped, with a strange little head, the "Broken" is a wicked adversary in hand to hand combat, because of its strenght, excellent time/response ratio and speed. Two armored sensor pods are located on the back of the mecha and contain "ECM" and radio equipment. The armament usually seen on the "Broken" is a 40 mm machine gun or a 105 mm autocannon (both upscaled versions of weapons already in use in the German army of this very moment). A special high caliber sniper rifle with optics linked to a cockpit screen is also available when the situation demands it. The "Broken" is widely used as a multi-purpose machine by the German army while the Japanese self defense force seems to prefer the ARL-99B "HellDiver". The first "Type 7B/2B" appeared in a Labor show as a prototype in 1998.



Manufacturer: Schaft Enterprise, Europe
Official Code: 7B/2B
Production Code: "Broken"
Roll Out: January 1998
Use: Military Labor
Height: 8.68 m **Width:** 4.69 m
Weight: 8.23 tons dry/ 8.92 tons full load
Maximum Weight Lifting Capacity: 4 tons
Standard Equipment: 40 mm autocannon, sniper rifle with special optics
"GSG-9" Special: "Swat" type armor and helmet smoke dischargers x6
Minimum Revolving Radius: 6.2 m
Color: Bright red (Prototype), Production Type: depending of multiple factors (ground, weather, etc.)

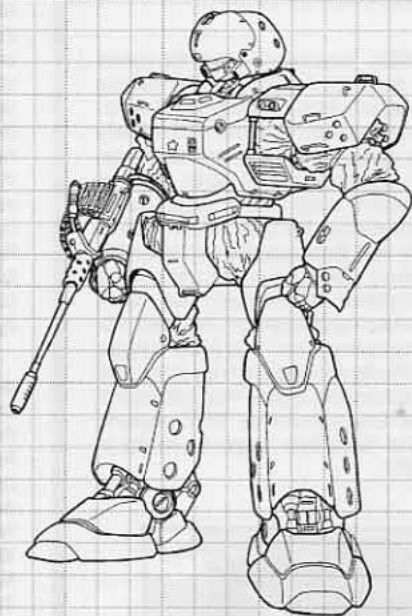


ARL-99 B "HELLDIVER"

ARL-99 B "HellDiver": The airborne trooper and "Green Beret" of the Labor world. A no nonsense machine, the "HellDiver" is extremely well equipped for any military tasks, ranging from airborne assault to military police duties. The most remarkable trait of this mecha is its head, which is the near exact replica of a helicopter pilot's helmet, with a protector shield that can be lowered in combat situations. The body's forms are simplistic and the armor, very efficient. The legs are powerfully built, with a shock absorber and movable air-brake system especially conceived for the parachute drops that are the specialty of this Labor, hence the name "HellDiver". The parachute pack was designed to be easy to dispose of after use and is equipped with four braking thrusters for deceleration during the drop. The mecha's armament consists in a 40 mm "chain gun" mounted on the right forearm. It is linked to a target acquisition computer and, of course, the pilot has access to a full range of scopes and optical sensors. An early prototype, the AL-X99, was developed for the "HellDiver". It was more powerfully built, taller, had more armor and, strangely, a bullet proof glass canopy, which was later replaced, on the "HellDiver", by a fully armored cockpit. The ARL-99B "HellDiver" began to roll out of the assembly line in October 1999 and is built by Shinohara Heavy Industries with the help of the J.S.D.F. (Japanese Self Defense Forces).

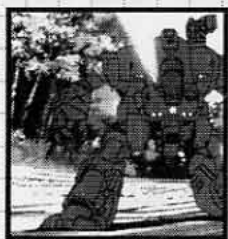


Manufacturer: Shinohara Heavy Industries
Official Code: ARL-99B
Production Code: "HellDiver"
Roll Out: October 1999
Use: Airborn Trooper Labor
Height: 7.95 m
Width: 4.55 m
Weight: 5.75 tons dry/ 6.81 tons full load
Maximum Weight Lifting Capacity: 3.1 tons
Standard Equipment: 40 mm Autocannon, Parachute Back-pack, Braking Thrusters x 4, Special "Crash" Helmet with visor and full range of optics
Minimum Revolving Radius: 3.90 m
Color: "Camo" Green

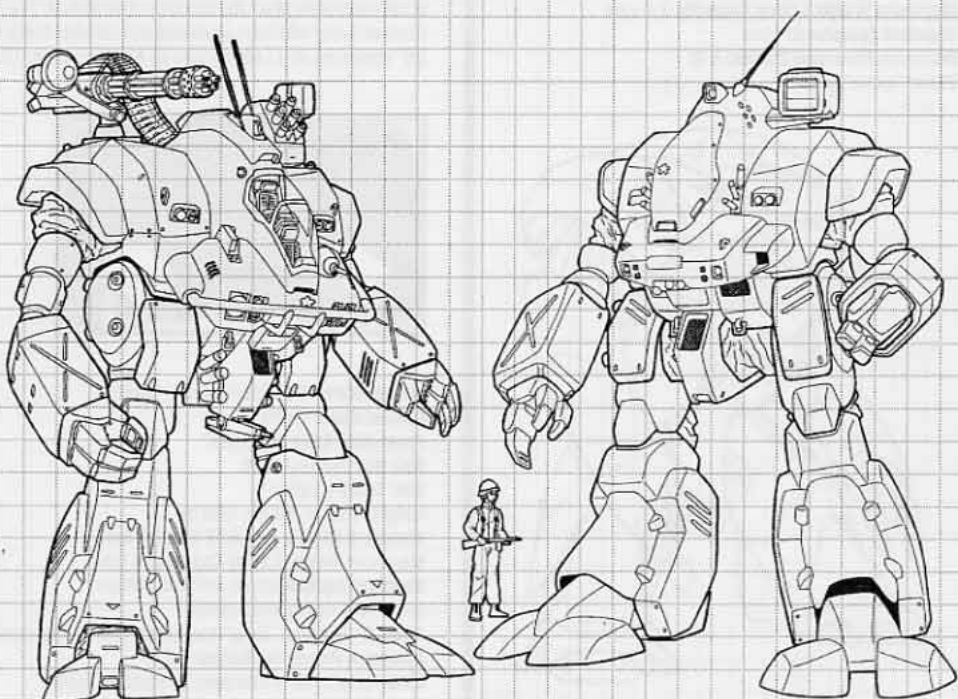


AL-97 "SAMSON"

AL-97 "Samson" (Light version and "S" version): The main battle tank of the Labor world, the "Samson" has a certain resemblance to its "Macross" counterparts, the "Destroids". Very tall and massively built, it was especially conceived to replace the conventional tanks and be the companion of the "HellDiver" on the battlefield. Two versions were created. The first one, the AL-97 "Light" could be compared to a heavy assault helicopter (the Russian Mi-24 "Hind" comes to mind) with a 20 mm gatling gun on the shoulder, a 12 mm and a 7.62 mm machinegun as armament. It's also equipped with a bullet proof glass cockpit canopy for two crew members, one pilot and one electronic systems operator/gunner. The "AL-97S" is much heavier, weighting nearly 2 1/2 tons more than the light version. This is due to the thicker armor, the replacement of the glass canopy by a metallic armored cockpit with vision blocks, and finally to the presence of the 90 mm tri-tube autocannon instead of the small caliber weapons. This autocannon hooks up on the mecha's bumper. Of course, speed is not very high and maneuverability, already low on the "Light" version, is quite reduced by all this excessive weight. A minimum revolving radius of 6.50 meters certainly doesn't help any. The "Samson" is built by the Ishii Heavy Industries and was designed with the help of the "Japanese Self Defense Forces". It entered service in late 1997 and has seen combat many times since.



Manufacturer: Hiishi Heavy Industries
Official Code: AL-97 and AL-97S
Production Code: "Samson"
Roll Out: Late 1997
Use: Main Battle Labor
Height: 9.10 m **Width:** 5.6 m
Weight: 9 tons dry/ 12 tons full load (AL-97S)
Maximum Weight Lifting Capacity: 4 tons
Standard Equipment (AL-97): 20 mm Gatling cannon (shoulders), Missile launcher (6 missiles), 12 mm Machinegun, 7.62 mm Machinegun, smoke dischargers x 6, extra sensors
Standard Equipment (AL-97S): 90 mm Tritube autocannon, Missile launcher (6 missiles), smoke dischargers x6, armored cockpit canopy
Minimum Revolving Radius: 6.5 m
Crew: 1 pilot and 1 electronic system operator/gunner
Color: "camo" green



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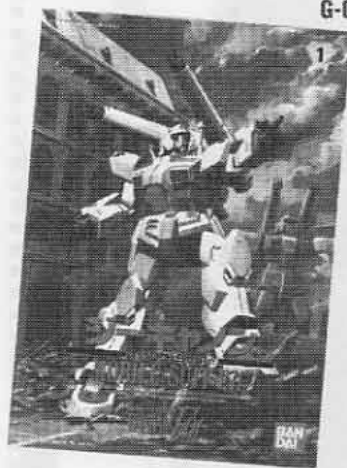




F-91 MODELS' REVIEW

by Marc-Alex Vézina

G-CANNON F-71



The first model in Bandai's all new "F-91" model kits series, the G-Cannon is also one of the best. Very easy to assemble, it is molded in three different colors, with great details. Mobility is above average, due to the well designed joints. The only disappointment was the "stick on" type decal sheet, but it is nothing more than a minor annoyance. All in all, a good model.
Appreciation: *****

VIGNA-GHINA XM-07



Bandai seemed to have some troubles finding the plastic for the kit. It is silvery-white, and doesn't seem to conform well to the mold because all the kit's details are poorly defined. The mecha is good-looking though, with average mobility.
Appreciation: ***

DENAN'ZON XM-01



Like the G-Cannon, the Denan'zon is a wonderful kit. Well detailed, great looking, very mobile, it proved to be rugged and easy to assemble. The only potential problems are the rubber joints of the wrists: paint may or may not stick to them, depending on the type you are using.
Appreciation: *****

GUNTANK RXR-44



Much smaller (and cheaper) than the other kits in the series, the little Guntank is somewhat different: it is variable, from mecha to tank and reverse. This increases the complexity of the model a little. The tank treads are especially frustrating, since they are molded in rubber. A nice touch is the inclusion of some diorama accessories: a missile (with dolly), and spare shells.
Appreciation: ****

***** A must for the serious mecha modeler

**** Great model, with few if any defect

*** Many defects, but still a good model

** Challenge for the model builder

* Lots of work required to make a nice model

X Waste of money

MS GUNDAM F-91



The Gundam is supposed to be the star of the series; unfortunately, Bandai tried to do a little too well. The mecha comes complete with a full choice of weapons and interesting options and details (like a choice of two heads), but its proportions just don't live up to the "hero image" of the movie. Assembly and painting are complicated by the "System Injection" process used to mold the kit: several hard to paint parts are already glued. Mobility is just below average, with little movement possible (especially the head).
Appreciation: ***

BERGA-GIROS XM-05



An honest model, the XM-05 is molded in black and purple plastic, with the usual Bandai quality. Relatively easy to assemble, it sports nice details and average mobility. The proportions will need some reworking to get the "movie" look, however.
Appreciation: ****

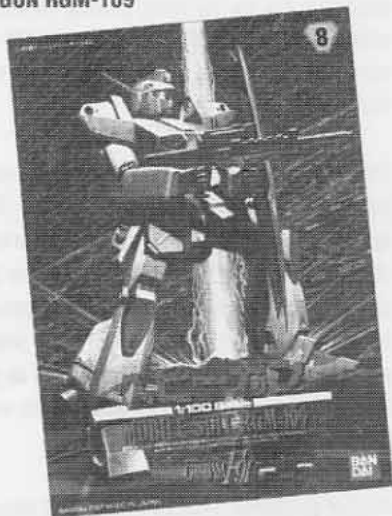
DAGHI-IRIS XM-06



Not much to say about this one, it is easy to assemble (except maybe the shoulder's rubber tubings) and basically looks very good. Only problems are the front hip plates, which are molded with the main body: they restrict the leg's mobility. The stickers are provided for both versions of the machine, Crossbones Vanguards and Federation.

Appreciation: ****

HEAVY GUN RGM-109



The last kit in the F-91 series (for now), the Heavy gun is also one of the best, if not the best. Great details, exceptional mobility, very easy to assemble, it scored perfect everywhere on my list. A must-buy for every modeler.

Appreciation: *****



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MADOX-01

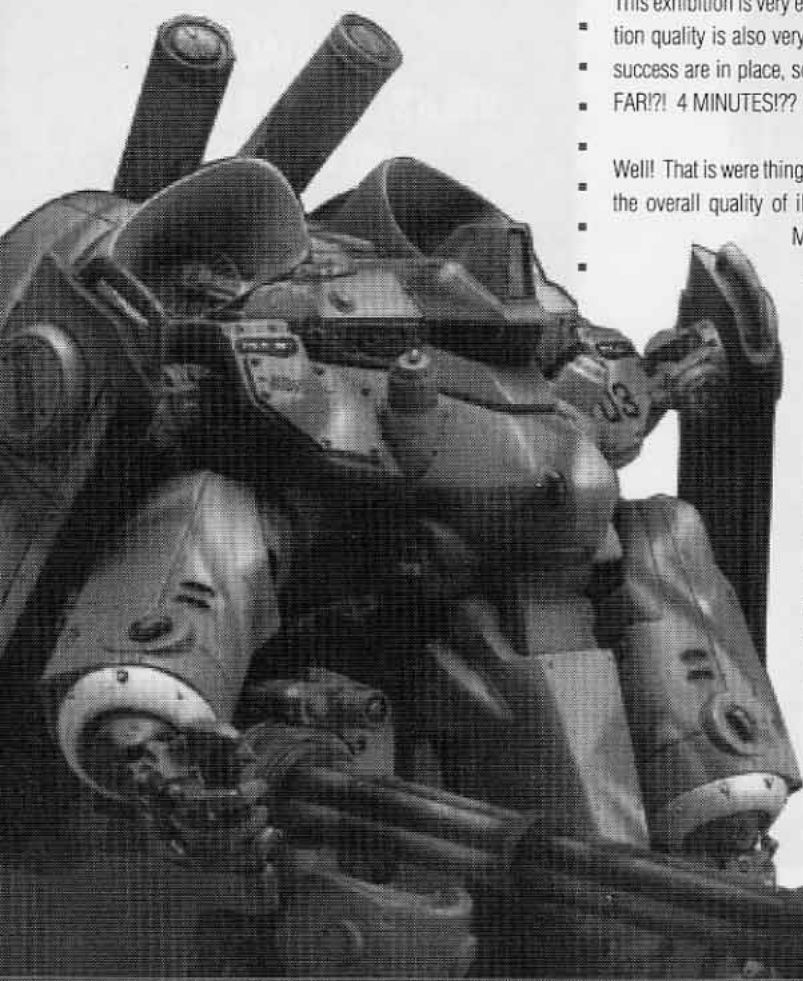
Have the creators panicked?

What else can one think when you are first treated with 4 minutes of seriously fantastic computerized technical demonstrations and very realistic battle field capabilities simulation. Then followed by some 20 minutes of a not so serious and so realistic story.

You see, MADOX is another mecha design. The 01 stands for: First Prototype. When I say prototype, I mean it is still going through some testing. Accordingly, the first four minutes of the movie reflect this fact:

- Computerized testing of the hands and arms actuators.
- Computer monitoring of the legs main shock absorbers hydraulic pressure.
- Verification of the power output of the turbine.
- Measurement of the walking speed capability and of the resulting stresses.
- Fine tuning of the main gun tracking and targeting systems.

This is what you witness in the first few minutes of this short movie. And let me tell you: It is amazing!!



Actually, I have never seen such a display of technological mechanism before. Not even in more futuristic and very popular series like GUNDAM. In those series, I found they have a great tendency to mystify the functioning of their machinery. But not in MADOX-01. It is all clear and realistic.

This introduction to the MADOX-01 is then followed by a demonstration of its fighting capabilities. The silhouette of three fast moving modern tanks appears next on the screen. They are rushing towards a ghost city where the prototype awaits its time of glory.

The fight that follows is one where movement, speed and blast effects feel right. The length of the battle is also realistic, according to today's standards. The creator(s) of this movie has(ve) even paid attention to the fact that no one, with just a bit of sanity, would actually take on the field for a real action demonstration against any situation enemy whose guns would be loaded with live ammo.

Instead, the tanks are remote-controlled by other tanks. These are confined in holographic rooms and set on movement simulators. On the other hand, the prototype is piloted. This totally representing today's idea of proving to some potential buyers the confidence a corporation has in its product. Anyways, the MADOX-01 shows, after just a short while, that it is worthy of that confidence.

This exhibition is very exciting, very thrilling. The illustration quality is also very high. In fact, all the elements of success are in place, so far, in this animated movie. SO FAR!! 4 MINUTES!!! What about the rest of it?!!

Well! That is where things start to go wrong. While it keeps the overall quality of illustrations, METAL SKIN PANIC MADOX-01 loses track of its initial seriousness, realism and, what I believe is the most important thing of all, credibility.

It could even be qualified, from that point on, a mecha parody. That's right! Here and there, in the continuation of this animation, it is actually possible to find what appears to be some gags. Like when the main character finds the user's manual inside the transportation package of the prototype.

Or when this guy, who wants to destroy the MADOX-01, charges his tank across open terrain, with his upper torso



standing out of the top hatch, blasting frantically at the incoming prototype, being shot by the MADOX-01 at the same time, and coming out of it without even a scratch! Come on!??

They begin by giving us a taste of technological marvel and then they flood the whole idea with a cheap story. This is not serious! Someone must have gone delirious in front of the obvious success the first four minutes of this Japanese animated movie would bring. This same person panicked for some reason and started to put some pressure on everyone to release the animation as soon as possible. Thus resulting in a diminished quality of the last twenty minutes of the scenario.

Another possibility could be that the first minutes were planned by a different person. That would easily explain the huge difference that exists between the beginning scenario and the remaining running time scenario.

Anyway, once you have finished watching this animation, you are left with a general feeling of disappointment. It promises so much at the start that there is no place, after viewing the rest, for any other feelings.

METAL SKIN PANIC MADOX-01 is not a bad movie, far from it. The first four minutes are really worth taking a look at. But their ingenuity are offset by the somehow more ordinary twenty other minutes that follows. Still, MADOX-01 is a Japanese animated movie that any mecha fanatic, like me, must see.

PROJECT ZEORYMER PART 1-11

Although this O.V.A. has been out for some time now (about 2 years) I was able to see it only a few days ago. Yes, the mechas are beautifully designed and the story is quite interesting. But behind all that show-off (very well done!), I was able to discern a descendant of the well known "Mazinger", "Combattler V" and other shows of the same direction. Now, don't get me wrong! "Zeorymer" is a great animation, with good drawings, interesting characters and truly original mecha designs. The interesting part of the plot is that "Zeorymer" (it's real name is "Zeorymer of the Heavens") is part of a team of 8 mechas, which forms the "Hakkeshu" Robot team utilized by the "Haudragon" conglomerate, who wants to dominate the world. But "Zeorymer" got stolen and all the O.V.A. episodes describe the attempts of "Haudragon" to recuperate it.



One particularity of this O.V.A. is the names of the mechas. Names like "Lanstar of the Wind", "Omzack of the Thunder", "Dinodilos of the Earth" or my favorite "Rose C'est La Vie Of The Moon"! All this to say, if you have the chance to see "Project Zeorymer", do it. I assure you will not regret it.

THE REVIVAL OF ZION

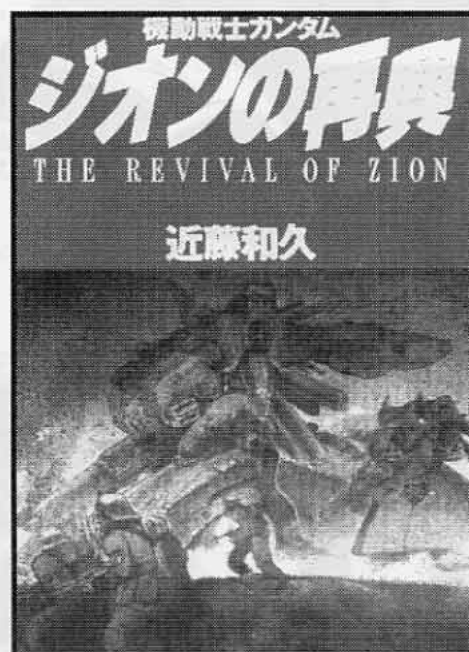
This is the first installment of a series of "Gundam" mangas by Kazuhisa Kondoh. "The Revival of Zion" is quite special in many aspects.

First, the story is about war seen from the Zion side (usually it's the contrary) and the operations done by MS Commandos. Second, the setting is very World War II style, with many operations done by parachuting the Mobile Suits on the battlefield. Third, nearly all the mechas are reworks from already existing MS. The Suits, the way Kondoh redesigned them, are much bigger, sport a lot more armor, thrusters and fire power, as well as having "camo" paint jobs.

The story is also extremely realistic, with plans and tactical drawings. Of course as in all Gundam stories, when a Suit gets hit, it explodes!

It should be said that the first story looks suspiciously like the first battle of "The Empire Strikes Back" from the "Star Wars" trilogy (a Zion ground base is attacked by the Federation and as a coincidence, it's in Antarctica). Al-

though I do not read Japanese, the intrigues are quite simple and easy to understand. I thoroughly enjoyed that 150 pages manga and hope that you will too.



THE DOGS OF WAR

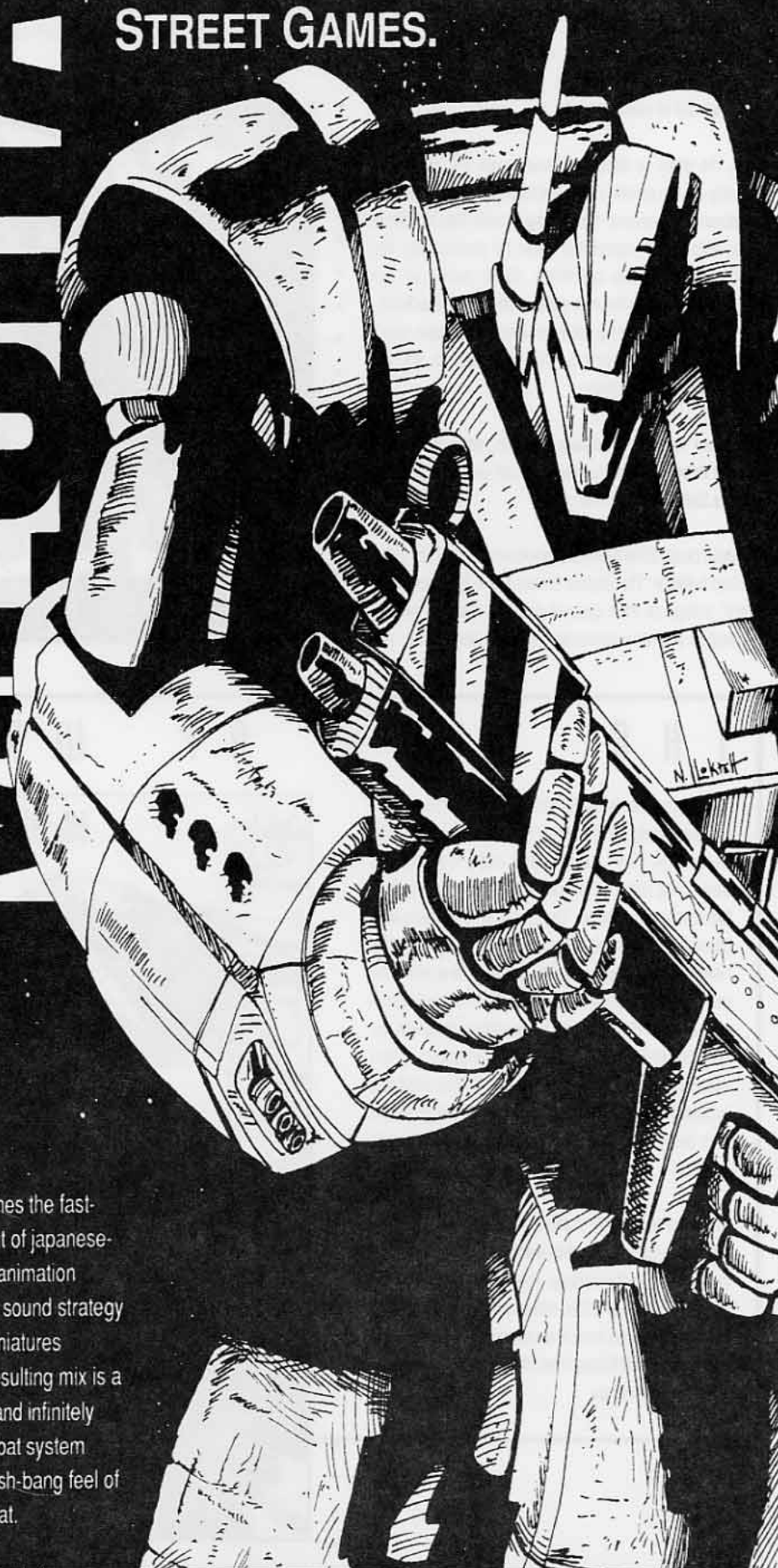
This seems to be Book Two of a collection of "Gundam" mangas made by Kazuhisa Kondoh. The first one, "Revival of Zion", was made of many short stories describing some of the side operations run by Zion MS commando teams. "Dogs of War" also deals with commando operations but all the action seems to be centered around one small team of veterans (who use real nasty Mobile Suits like AMS-119 "Gears Dogs" and a PMS-007 "Jaguar" especially designed by Kondoh) who are trying to find out the location of two Gundam Mobile armor (they look like fortresses!) and to destroy them. They often have some trouble during their ops (the last one is a rout, only one of the guys returns).

As in the first book, Kondoh was able to give us a glimpse of what a real MS war would be like. All the designs are extraordinary, the best ones being the PMS-007 "Jaguar", Zion MS and the modified RGM-89 Jegans. If you have the chance to find this book and are a WWII History freak, this will really be one of your favorite manga.



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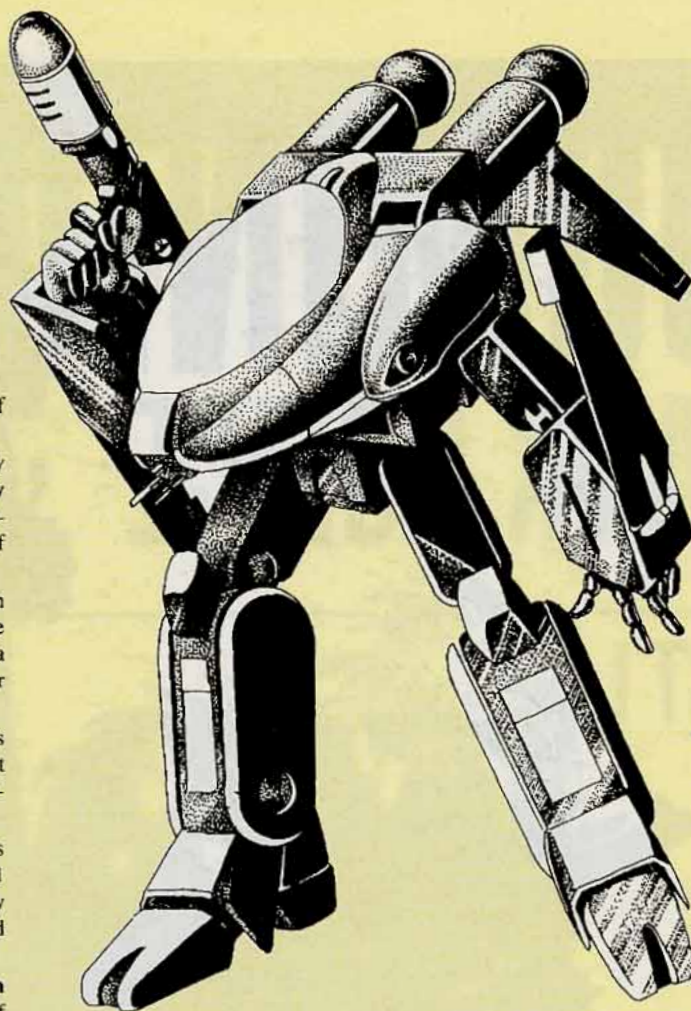
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Volume Two: Contains episodes 40: **Volunteers**, 41: **Half Moon**, and 42: **Danger Zone**. More combat and adventure in space and on Earth as the ensuing war begins to heat up. The Masters want something but nobody can figure out what it is. The mystery continues, but spirits are high, the **Southern Cross** appears to be on a roll. **Available December 1st, 1991.**

Volume Three: Contains episodes 43: **Prelude to Battle**, 44: **The Trap**, 45: **Metal Fire**. **Dana** leads her squad into the alien mothership where they experience a number of strange things, encounter **Musica**, mistress of the Cosmic Harp, and barely escape a trap. civilians are taken hostage and turned into the zombie-like pilots of bioroids. **Zor** is captured and the mystery and madness thickens. **Available Mid-January, 1992.**



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Volume Four: Episodes 46: **Star Dust**, 47: **Outsiders**, 48: **Deja vu**. **Dana** continues to exhibit a bit of empathy and psychic hunches and can not shake certain feelings about the captive bioroid pilot (**Zor**). **Available late February, 1992.**

Volume Five: Presents episodes 49: **A New Recruit**, 50: **Triumvirate**, 51: **Clone Chamber**. It is decided to induct **Zor** into the Army of the Southern Cross. A full scale assault is launched against the Masters. **Zor**, **Dana** and **Bowie** get closer to the secret of the Robotech Masters and protoculture. Plus epic space battles! **Available late March, 1992.**

Volume Six: Contains episodes 52: **Love Song**, 53: **The Hunters**, 54: **Mind Game**. **Louie Nichols** creates the Pupil Pistol, **Dana** is involved in more intrigue, while the savage space battle continues, with exciting fight sequences involving the **Veritech Copter**. **Available late April, 1992.**

Volume Seven: Presents episodes 55: **Dana in Wonderland**, 56: **Crisis Point**, and 57: **Day Dreamer**. The continues to escalate, with terrible consequences. **Zor** seems to be going mad, **Dana** is becoming more rebellious, **Bowie** finds love and the mystery continues. **Available late May, 1992.**

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